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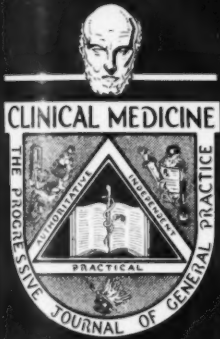
LEADING ARTICLES

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VOLUME 48

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SEPTEMBER
1941



G U L P

and

run

The modern way of life is "gulp and run." With appointments to keep, time clocks to punch, trains to catch, deadlines to meet, orders to fill, it's hurry, scurry, bustle, gulp a sandwich and run! Unfortunately, even among those who take more time with their meals, equally serious dietary indiscretions are not uncommon. The food faddist . . . the finicky child . . . the woman who diets to win stylish slenderness . . . the desk worker with low energy requirements and poor appetite . . . all take serious chances with the adequacy of their diets. The classical vitamin deficiency diseases may never develop, but numerous studies show that *partial* vitamin deficiencies are by no means rare. Where such a condition is known or strongly suspected to exist, the administration of a reliable vitamin supplement is a rational measure. For this purpose, *Abbott* vitamin preparations are more and more commonly employed. Physicians know that specifying *Abbott* is an effective means of insuring that their patients receive all of the vitamin units intended. Abbott Laboratories, North Chicago, Ill.

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★ Editorial ★

Dr. Frank H. Lahey

President of the A. M. A.

THE new president of the American Medical Association, who assumed that high office at the Cleveland Meeting, was born at Haverhill, Mass., June 1, 1880, and received his Doctorate in Medicine from Harvard University in 1904.

Immediately thereafter he became a member of the general service staff of the Boston City Hospital, and the following year was transferred to the surgical staff, where he served for two years. In 1908 he was on the visiting staffs of the Long Island, Children's, Infant's, and Boston City Hospitals, and resident surgeon at the Haymarket Square Relief Station.

In 1908 he was appointed instructor in surgery at Harvard Medical School, and in 1913 became assistant professor, and later professor of surgery at Tufts Medical School, which position he held until 1917, when the first World War came along. Then he was given a major's commission and worked with Evacuation Hospital No. 30, in the A.E.F. In 1923 he was made professor of surgery at Harvard Medical School, and held the chair for one year.

At present, Dr. Lahey is director and chief surgeon of the Lahey Clinic, Boston, and surgeon-in-chief of the New England Baptist and New England Deaconess Hospitals. He is also a member of the board of governors of the American College of Surgeons; past-president of the American Association for the Study of Goiter; a member of the American and International Surgical So-

cieties; and a member of the editorial boards of *Surgery, Gynecology, and Obstetrics* and the *New England Journal of Medicine*.

With this background of experience, the new duties that Dr. Lahey has recently assumed will not be unfamiliar nor unduly onerous, and we offer him our congratulations and hearty co-operation.

Rush Changes Hands

THE thousands of graduates of Rush Medical College, all over the country, will be interested, and perhaps a bit depressed, by the news that this famous school, with more than 100 years of outstanding accomplishment to its credit, ceased to exist, as an independent teaching institution, on July 1, 1941, when it, along with the Presbyterian Hospital, severed its connection with the University of Chicago, which has been maintained for more than 40 years, and became a part of the teaching staff of the University of Illinois. The members of the old Rush faculty will be known as "Rush Professors," and a special board of trustees will retain the Rush Charter, granted in 1837, and administer certain funds.

Many old Rush men will feel a sentimental sorrow over this step, but there is little doubt that the cause of medical education in the Midlands will be furthered by it.

Cook County Hospital is one of the greatest reservoirs of clinical material in the country, and with the Presbyterian Hospital and the Central Free Dispensary, which are almost next door to it, and University Hospital only a few blocks away, offers unsurpassed teaching facilities, which have been utilized for years by the complete medical schools of the University of Illinois and Loyola University, and the clinical undergraduate and postgraduate schools of the University of Chicago, which have been known as Rush Medical College.

But the University of Chicago is distant, physically and spiritually, from this wonderful medical center, and one cannot help feeling that the atmosphere of pure scholasticism prevailing on the Midway may have had an effect upon the preclinical undergraduates which is not wholly favorable, and which will be improved when they spend all the years of their medical schooling amidst professional surroundings.

By an act of the Illinois Legislature, this West-Side "Medical Center District" is now an administrative entity, with its own staff of officials and with powers of eminent domain, and the present arrangement appears to be most advantageous to all concerned.

So farewell to grand old Rush, and hail to the augmented and reinforced College of Medicine of the University of Illinois.

Imaginary Diseases

EVERY now and then we hear someone (who may, regrettably, even be a medical man) say that Mrs. Soandso has an "imaginary disease" or diseases. When a physician says a thing like that, he betrays ignorance of certain fundamental principles, for purely subjective distress is just as *real* as that caused by objective physical lesions—in fact, pain and discomfort are always subjective and their cause in no way alters their reality, as far as the patient is concerned.

A feeling of disgust (which may be caused by a memory or a delusion, as well as by a tangible object or an objective experience) can cause vomiting just as effectively as a dose of apomorphine or a rough ocean voyage—and vomiting is certainly not "imaginary."

When a patient comes to a physician, it is because that individual is *suffering*, in one way or another, or is alarmed over some unusual condition (real or fancied) in his physical organism or his sensations (which are important functions of that organism), or both; and that, also, is a form of suffering.

The physician's job is to *find out* what is *causing* the patient's distress—whether it be some primary disturbance of one or more of the physical parts or organs, or some shock or dislocation of his emotional or mental life—and then do everything in his power to remove or correct whatever is wrong.

If there is some physical abnormality, physical and laboratory methods will bring it to light, if carried out with sufficient intelligence and industry, and they also generally (but not always) give a clue to the underlying cause. If not, we must look

otherwise, and that means the *family and personal history*, which, in all except obvious emergency cases, should be the *first* step in the study of a patient.

The taking and recording of an adequate history may be a laborious and time-consuming procedure, and may tax the patience and diplomacy of the physician to the uttermost, but there is *no substitute for it*, so all clinicians should learn how to do it expertly and record the findings accurately and clearly, so that the notations can be understood later by any qualified person.

The result of such efforts may be the discovery that the basis of the patient's trouble is emotional or mental or both; but that does not mean that his *disease* is "imaginary"; merely that it must be treated by measures and technics which are as intangible (but *real*) as the cause—in a word, *psychotherapy* of one sort or another. But that is another story, and a *long* one.

Practical Nurses

IN HIS presidential address before the American Medical Association last June, Dr. Frank H. Lahey, of Boston, said:

"I have been fearful lest the higher and higher standards of requirements for entrance and graduation in nursing might make it more and more difficult to obtain a sufficient number of nurses to meet our increasing demands With many of the personal attentions to patients delegated to ward maids, the real art of nursing can be lost to the nursing profession."

Coming from a man like Dr. Lahey, whose experience with nurses is long and wide and whose feeling toward them is highly sympathetic, these words need careful thought.

With the present demands for registered nurses by the army, the Red Cross, public health agencies, industry, and other specialized fields of service, it is not wholly fanciful to vision a time when even the relatively few people who can afford the high cost of their attentions will have serious difficulty in obtaining them.

There is scarcely a community in the country where there are not one or more capable and intelligent women, with a reasonable amount of practical and theoretic training, who are perfectly able to care for 90 percent of the patients who need a nurse in the home, and would be glad to do so, at a relatively modest fee, if they could be assured of having sufficient employment of this sort to make a reasonable living.

Now is the time for every specialist in family practice, especially in the smaller cities and towns, to begin a double-barreled educational campaign. First he should get in touch with as many of these "practical" nurses as possible, so that he can look up their qualifications and study their personalities, and then keep in close touch with two or three or more of them, according to the needs of his practice.

Then he should begin a serious campaign of "selling" the "practical" nurse to his patients (many of whom have high-flown ideas, wholly out

of line with their financial status), so that, when such help is needed, such women will be welcomed.

As the doctor works with the nurses he has selected, he can tactfully and sympathetically add to their knowledge and ability, from day to day, so that their services will become more and more satisfactory.

If such a course were followed by a majority of our general clinicians, for a year or two, it might well be that the expensively trained registered nurse would be required only in relatively large hospitals and in certain special fields, and that the general run of patients in homes would be better served at more moderate expense.

We will be exceedingly glad to hear from any of our readers who have had experience along this line.

Community Questions

THE war work that is now going on so actively places a heavy burden on every community where civilian activities are in progress, and as no one seems to know just where it will start next, the physicians of all towns and neighborhoods where it may happen should be asking some pertinent questions and, if the answers are not satisfactory, should be doing their part to make them so.

Here are a few of these questions, to give an idea of their character. There are many more that community officials and medical men must be considering.

Will the local public water supply be safe under

all weather conditions, in the face of the added strain put upon the water works in serving the increased population?

Is the existing sewerage system capable of disposing safely of a much larger quantity of sewage, without any risk of dangerous overflow or backwash?

If, by chance, the newcomers to town should introduce the germs of smallpox, diphtheria, or typhoid fever, would the original residents fall prey to these germs? Or have both the old-timers and the newcomers been safely immunized?

Are the schools and local health agencies protecting the health of the children as far as possible against the possible new hazards, by teaching nutrition and hygiene, by practicing good sanitation, by encouraging medical and dental examinations, and by stimulating programs of immunization?

Is the community attempting to discover (by means of x-ray examinations) all persons who may unwittingly carry and spread the active germs of tuberculosis, or are the infected persons allowed to live in close contact with the well, thus exposing the healthy population?

Are such germ-carriers as flies, mosquitoes, and rodents allowed to flourish in the neighborhood, or have programs for their control and eradication been undertaken?

It will be a good plan to talk these matters over with your city or town officials and find out how you can best do your part of the job.

NEXT MONTH

Dr. F. A. LaBreck, of Eau Claire, Wis., will present (with illustrations) a new type of obstetric forceps which bids fair to reduce maternal and infant mortality.

Dr. Henry R. Harrower, of Glendale, Calif., will discuss the problem of adrenal stress in surgery, including shock and infection.

The second part of the symposium on surgery in general practice will appear.

COMING SOON

"Reconstruction of Enlarged Breasts by Plastic Surgery," by Clifford D. Dowkontt, M.D., New York City.

"Modern Management of Arthritis," by Theodore S. Goldberg, M.D., Kansas City, Mo.

SEPTEMBER

*The leaves
Are growing old.
The swallows have flown south.
Debating katydids talk on
All night.*

G.B.L.

* Leading



Articles *

Exercise for Physical Fitness

By

L. G. KRANZ, Evanston, Ill.

Professor of Physical Education, Northwestern University



Prof. Kranz

Every physician recognizes the unsatisfactory physical condition of middle-aged people of both sexes, but does not quite know what to do about it. Here Mr. Kranz, an expert of many years' experience in physical conditioning, outlines a philosophy of physical fitness and makes practical suggestions.

ONE of the serious problems facing America today is the physical condition of men and women beyond college age. Vital statistics are alarming regarding the number of heart failures, and poor body condition has no small part in explaining these statistics. "Health comes in through the muscles and flies out through the nerves," was stated years ago, but is just as true today.

The emphasis on skill in sports and recreation has led us away from the importance of general physical condition and organic vigor. The physiologic value of exercise must be re-emphasized, in order that it may be given its rightful place in the scheme of things, and the medical profession must take its share of the responsibility for the failure to stimulate and interest our young people in the matter of well-conditioned bodies.

Incentives to Physical Fitness

My experience has been that people become actively interested in the conditioning values of exercise under two drives. An example of the first of these is seen in a young man representing a varsity team. Great emphasis is placed upon the importance of fine physical condition. He works diligently, day in and day out, not only for skill of performance, but also for body perfection. Little does he realize, during this period of training, the value of the fine working body that is his. He is chiefly concerned with the stress of varsity competition, the stimulus of which drives him to the necessity of fine body condition. When this drive is over, however, he soon gives up the body condition because, without competition, the effort involved in training no longer seems worthwhile. It becomes work. Had he been properly impressed with the value of body condition, he would realize its importance and would not be likely to give

up so readily. We must find a substitute for the competitive drive, that will make him want to retain the joy of life which comes with the ability to *do things*, in a body capable of doing them. With the cessation of the training of competition, however, these bodies soon degenerate.

In 1917, our country became greatly disturbed about the statistics showing a large percentage of our young men from 20 to 30 years of age physically unfit for military service, and the same thing is now happening again (see Chart I). In Europe,

PERCENTAGES OF 82,565 DRAFTES EXAMINED IN NEW YORK CITY

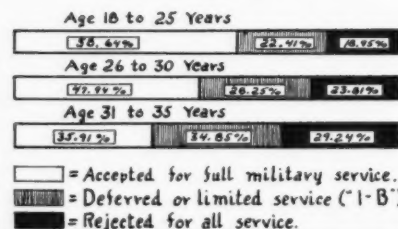


CHART I

today, nations are at work conditioning the bodies of men up to 50 years of age for war service.

The second drive I have in mind is that which comes with preparation for war. The programs of conditioning I saw in Europe, in 1938 and 1939, were even more thorough than those connected with our competitive athletic sports. It is interesting to note that, in countries where the young men have been accustomed to a rigorous climate and a rugged terrain, this conditioning was not too difficult; but where ease and luxury have been the rule, the departure from well-conditioned bodies was serious. Thus the drive of war also works toward better organic vigor and function.

In this, as well as in the first drive, realization of the value of this well-conditioned body is lost in the war situation, and as soon as these men are withdrawn from the army, the work attendant upon developing fine bodies is forgotten, and there is a prompt return to ease and absence of the effort necessary for conditioning. This was certainly true in America following the first World War. We were wide awake to the necessity for conditioning during the war experience, but that awareness

was lost almost immediately following the signing of the armistice.

Danger in Sports

In reviewing some of the articles dealing with the dangers of sports activities, it seems that the blame has been improperly placed. The injuries that are most talked about are not those incurred in competition among young people, but are chiefly those that come to people beyond the so-called competitive or college age. Someone is injured when on a ski run, another playing tennis, another playing golf or bowling or even indulging in ping-pong. There is nothing wrong with any of these sports. Wholesome fun and recreation are derived daily from them by millions of people, even though a few may be injured.

If someone happens to be injured while participating in one of these sports, it is probably not because of the danger of the sport, but because the individual was *unprepared*, physically, to take part in that activity. It seems to me it is time for a new factor to be considered—that of *conditioning the body* for the sport one expects to take part in, rather than depending upon the sport to condition the body.

It is easy to see why some people are injured in sports by lack of body preparation. Skill in a sport is not lost over a period of years of non-participation; rather, *one loses the body with which to perform the skill*. Once a person has attained skill in a sport—tennis, swimming, golf, or any other—he retains the skill, even though he does not play regularly, but the body degenerates. Those fine skill patterns may drive him beyond his physiologic limits, and then he is in danger of injury.

To avoid such situations, exercise must be a process of more complete education in preparation of the body for *any kind of activity* in which men and women expect to take part. Many persons take vacations without making sure of their physical fitness for them. They try to engage in activities, during that time, for which they are not prepared, and then spend a few days—or months—recovering from the vacation! Had they prepared themselves for the activities to be undertaken, they could have enjoyed the participation, rather than suffering because of it, or would have known enough not to attempt it. It is necessary that one decide upon the activities one wishes to take part in, and then *keep the body prepared for those activities*. Bear in mind, also, that it is well for one to keep up some worthwhile physical activities, for they are essential, not only for the pleasure of doing, but also for the physiologic values connected with regular exercise.

Thus it becomes evident that we should not try to do things for which we are unprepared, and also that we should prepare the body to continue in performing some activities. If going to ski, it is important that one prepare one's body for skiing. Many injuries will be avoided if this is done. The boxer goes through serious preparation when training for a bout. He knows his body must be in condition or he is going to take serious punishment. The athlete makes serious preparation for his competition and so he spends enough time to prepare his body for the skills he expects to use.

Many people say that they plan to avoid strenuous exercise of all kinds, and so do not need a conditioning program, but it must be understood that Nature itself makes demands that are strenuous. Yawning, sighing, stretching, coughing, and

sneezing are all strenuous, and injuries occur from these, if the individual is not prepared for them. It is necessary, in daily life, to walk upstairs, maybe run for a streetcar or bus, or jump out of the way of an automobile. Since these are necessary, we should prepare for them, so that serious results will not occur. Many accidents occur in the home. A wife asks her husband to move heavy articles of furniture, and the man is willing to try it, even though his body is unprepared for such activity, and is thus vulnerable to injury. So we should prepare the body for the ordinary activities of life, and realize that, in this preparation, we are getting physiologic values beyond the mere performance of activities.

Systems of exercise, in the early days, were intended as a substitute for the loss of activities resulting from the machine age, and we incorporated into these programs, activities that had great physiologic value. We thought of the many ills that come with the sedentary life, and we were conscious of the great joy of the individual who has a vigorous, well-conditioned body. I shall not, here, attempt to review in detail all the material that has been printed on the subject of the values of exercise to the heart; the circulatory apparatus; the organs of digestion, elimination, and respiration; the nervous system and so forth, yet I feel that it is tremendously important that we examine these values, because they may be a substitute for the two drives mentioned in the earlier part of this discussion.

When I think of the physical condition of men and women today, I cannot help feeling that the programs of exercise of the past twenty years have been partly responsible for the incorrect attitudes toward and scant interest in body conditioning. Of course, educational processes do not "take" equally well with all people, but the evidence of failure in relation to physical activities seems to be overwhelming, in that such a large percentage of our people have given up body preparation. If the exercise program had been effective, such a condition would be less serious, and I feel that a great deal of the blame should be placed upon the *kind of activity* that has come into the exercise program.

The emphasis, for the past fifteen or twenty years, has been entirely on sports, which seem to have been important only to youth. We have emphasized skills in sports to such an extent that people who are poor in this line become discouraged, and even those who have well-developed skills give up soon, because the competitive age does not last long. The fine performance is shelved early in life, and also the interest in developing and keeping fine bodies. It seems to me, then, that our problem is one of endeavoring to emphasize activities that will bring about fine body condition, whether persons ever perform well or not. Were the larger group of young people, who are mediocre in performance, educated in this way, rather than only in skill, they would continue to take daily exercise, because of the joy of living that comes with being able to do things.

I can see, then, in the exercise programs of today, a revaluation taking place, incorporating a more serious educational program for body conditioning. Instead of having children, early in life, think only in terms of skill in sports, I would have them understand more fully the more serious aspect of the activity program. I would have them understand that skills and performance are only temporary objectives; that even after skills

are no longer worth using, the individual must still live with the body that is his, be it sound or puny. I would, therefore, use the sports program, in which they are greatly interested, as a stimulus to develop bodies and, at the same time, teach them to understand the unrealized values that are beyond sports performances.

Neglected Muscles

In considering the relation of these matters to the adult population, it seems clear to me that certain parts of the body are most likely to degenerate, because of lack of the proper kind of activity. Most people continue to live with a minimum of effort, and that minimum calls into play certain parts of the body, but seriously neglects other parts that have much to do with proper balance and proper function.

It is evident that the abdominal area of the adult shows the first signs of degeneration. If the abdominal muscles were to be considered only because of their function of balancing the pelvis on the top of the femur, that in itself would be important; but their action as a retaining wall that controls the curvature of the lumbar spine, as well as a massaging agent to the internal organs, makes it still more important that we give serious consideration to the condition of these muscles.

Therefore it is obvious that ordinary movements, which do not call these muscles into play, should be supplemented by a daily program of abdominal effort. It is also evident that most of the sports participated in by adults do not call the abdominals into play. Sports like golf and bowling, which are most commonly indulged in, fail in the maintenance of these muscles, as anyone can see by observing their condition in the large number of people who are participating in these two sports. Thus it is clear that the abdominals must be given special consideration, designed to bring about that balance which is so essential to the proper functioning of the organs within, as well as the mechanical advantage that comes with the proper balancing of the pelvis.

The second part of the body that degenerates is the feet. The heel is the weight-bearing surface, while the smaller bones of the front part of the foot are intended for balance, and function most effectively when the muscles of the toes are called actively into play. Most foot trouble develops because the individual walks *over* the feet, calling into play the soleus and gastrocnemius muscles, rather than *with* the feet, using, along with those mentioned, the flexor longus digitorum, flexor longus hallucis, flexor brevis digitorum, and the other accessory muscles of the plantar surface of the foot. When these are properly used, the action of the foot is preserved and the joy of walking is continued.

The third part of the body to degenerate is the hands, arms, and upper trunk. It is evident that we become shallow breathers as we grow older, and one of the important contributing factors to this condition is lack of activity in the parts just mentioned. Most men and women use their hands for eating and talking, but for little more strenuous activity. Since the accessory muscles of inspiration are those of the upper arms and chest, and since these muscles are seldom called actively into play, it is clear that exercises of body support with the arms and hands would be decidedly beneficial in maintaining these muscles at a high level of efficiency, and therefore would keep them in condition for more effective functioning in respiration.

We keep what we use; we lose what we fail to use, therefore a program of supplementary exercise must be incorporated into daily living, if we are to prevent the rapid degeneration that is taking place in adult life, as shown by the physical unfitness of many present draftees, and as must be even more true of women and of older men.

Suggested Exercises

In order to make this discussion more practical, I shall suggest a few simple exercises, which require no apparatus, for strengthening the neglected muscles, especially in middle-aged people.

In this connection, remember two things: First, when beginning systematic exercise, after a considerable period without it, the movements should be performed well within the individual's ability and tolerance, and gradually increased as strength develops; second, no machine that aims to substitute *passive* for active exercise can achieve the results obtained by the deliberately willed and purposeful use of the muscles.

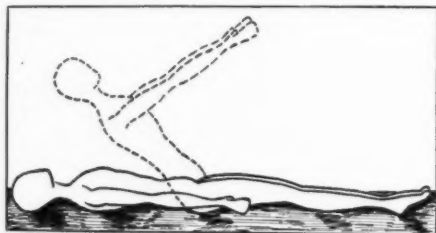


FIG. 1.—Simple abdominal exercise.

For the *abdominal muscles*, acquire the habit of standing and sitting always with the belly as flat as possible, the back straight, and the pelvis evenly balanced on the heads of the femurs. In addition, once or (better) twice *every day*, lie flat on the back, on the bed or floor, raise the head and shoulders about 30 degrees, *without the assistance of the elbows*, and then lower them, repeating this movement, at first, until the muscles begin to be felt, and then *stopping*. It is not necessary nor advantageous to come up to the sitting posture, as the rest of that excursion is performed, not by the abdominals, but by the ilio-psoas group of muscles. One should gradually increase the number of these movements until they can be performed 60 times, without undue strain.

One can make this a *combination* exercise by relaxing and extending the arms and hands and inhaling, while lying flat, and vigorously flexing the hands and forearms, or bringing the extended arms upward and forward until the palms meet (see Fig. 1), and exhaling, as the shoulders are raised. The two arm exercises can be alternated, if desired, at the same or different sessions.

For the *arms and shoulder girdle*, work on the horizontal or parallel bars or overhead rings, or bag punching, is especially good if apparatus is available. If not, one may flex and extend the hands, forearms, and arms, *vigorously and against muscular resistance*, as often as is possible without strain, up to 50 or 60 times, night and morning. Also one may lie prone on the floor, with the elbows drawn in under the chest, the weight resting on the tips of the toes and the spread palms, and the back stiff, and *push up the shoulders* by an effort of the triceps and shoulder-girdle muscles.

This exercise is rather strenuous for a beginner, and should be used with discretion.

For the feet, one should wear shoes having enough room forward, and enough flexibility, to give the toes free play, and then, when walking, think about moving the toes and getting a spring by walking with, not over, them. For systematic exercise, standing on the edge of a stair step and bending the toes down over it, or picking up objects with the toes, is excellent.

It seems to me that the medical profession has a

definite responsibility in helping people to realize the value of proper exercise, and that, if they will repeatedly stress this point, they will encourage people to apply themselves daily to the task of maintaining the working condition of the body, and aid in preparing young men and young women to attain physical fitness for a useful life and for long retention of the joy of living and doing.

Dept. of Phys. Education,
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Spengler's Immune-Blood in Tuberculosis of the Kidney

(A Case Report)

By

JOSEPH HOLLOS, M.D., New York City

Kidney tuberculosis is such a dangerous condition, and so difficult to treat successfully, that any rational suggestion, like this of Dr. Hollos, should be welcomed.

UROLOGISTS generally agree that tuberculous kidneys should be removed. Emmett and Kibler, of the Mayo Clinic,* published a study of 1131 nephrectomies, covering twenty years of observation, from 1912 to 1932, giving an account of postoperative sequelae, and came to the conclusion that it is impossible to prove, clinically, that one kidney is free of infection.

Of the cases under observation, 453 died later. Of the remaining 678 cases, 70 percent answered the follow-up questionnaire. On this basis it was possible to establish that 36 percent of the cases were cured and 12.6 percent showed improvement as the result of the operation.

Since it is impossible to rule out infection of the other kidney, the patient, after the nephrectomy, is never certain of the condition of the remaining kidney, especially in cases where a slight infection had been diagnosed before the operation.

I wish to report a case of tuberculosis of the kidney in which cure was effected by means of Spengler's immune-blood.

Mrs. Lilian F., 28 years old, complained, on February 16, 1936, that she had felt frequent cramps in the abdomen, with urgency of urination and bowel movement, for the past half-year. In the beginning, these cramps came two or three times a day; later, only once in every one or two weeks. The attacks generally lasted an hour or two and disappeared spontaneously. Recently she had had urgency of urination. In general she felt well enough. She had one child, two and a half years old. Her father died of chronic pulmonary disease.

She had been examined at the Joint Disease Hospital, with the following findings:

Cystoscopy: The right ureter opening showed ulcerations and edema.

X-Ray: There was moderate dilatation of the

pelvis and descending major calyx of the right kidney. The ureter was of varying caliber, with a constriction in its lower third and at the junction of the proximal and middle thirds.

Bacteriologist's report:

Right: A few tubercle bacilli were found.

Left: No bacilli found.

Removal of the right kidney was recommended.

Examination: The patient was well developed and moderately nourished, and there were no pathologic findings in the chest. Her pulse was 72; weight, 132 pounds; hemoglobin, 80 percent; abdomen, negative. The right kidney region was slightly sensitive on pressure.

Urine, very turbid; albumin, 0.025 percent. In the sediment many pus cells and acid-fast bacilli were found.

Course of Treatment with Immune-Blood

Feb. 19: Injection, 0.5 cc. of dilution No. X, and daily inunction with dilution No. VII.

Feb. 29: She had to urinate every half hour and twice during the night. Injection, 0.5 cc. No. IX, and daily inunction with dilution No. VI.

March 10: The urgency of urination was less and she had a good appetite. Injection, 0.5 cc. No. VIII.

March 20: Urgency very little; at night only once. The urine was very cloudy, with traces of albumin. Injection, 0.5 cc. No. VIII.

March 30: She had, in the early hours of the past two days, very severe cramps, lasting for three hours, in the right side of the abdomen, and strong urgency of urination and bowel movement with vomiting (a reaction). Injection, 0.5 cc. No. X.

April 9: On March 31 she had a third attack of cramps, lasting for four hours, with the previous symptoms, after which she felt well. Injection, 0.5 cc. No. VIII.

April 20: She had a very severe attack on the 11th, and twice on the 12th; since then she had felt well. The urine showed only slight turbidity, with slight traces of albumin and a few tubercle bacilli in scattered fields.

After this she had several less severe attacks, and the urine gradually became quite clear. In June there was no further turbidity and no albu-

* Emmett, John, and Kibler, John M.: Renal Tuberculosis: Prognosis Following Nephrectomy. *J.A.M.A.*, Dec. 24, 1938.

min, except in traces after a strong reaction following the injection of dilution No. 11, on July 2. In July there were no bacilli in the urine. In the middle of August there were three attacks, in each case after a large dose of immune-blood. Then I continued the treatment with smaller doses, and gradually increased the doses again without any further reaction. In December, 1936, and January, 1937, I injected the undiluted immune-blood (largest dose, 0.5 cc.), without any sign of reaction.

I completed the treatment April 8, 1937. By that time the patient had been without any sign of illness for eight months, felt very well, and the urine showed no trace of turbidity or albumin. Her pulse was 60; weight, 139 pounds.

On October 22, 1937, I sent her to the Joint Disease Hospital for re-examination. As she was pregnant, no instrumental examination was performed. The Hospital's laboratory findings were as follows:

Urine clear; in the sediment few white blood cells, but no bacilli; *Guinea pig inoculation* positive.

Since the patient felt quite well, she did not appear for further treatment in my office. I wrote to her several times to come in for a check-up, and on November 26, 1938, she finally presented herself, having given birth, eight months previously, to a baby weighing 9 pounds, which she nursed until I saw her. She had been in good health, and weighed 150 pounds. Her pulse was 64 and her urine was clear, with no tubercle bacilli in the sediment, but the guinea pig inoculation was still positive.

I again instituted immune-blood therapy and continued it for six months. This time she had no lytic reactions. At the end of the treatment, *guinea pig inoculation* was negative.

I presented this case before the American Hungarian Medical Association May 12, 1940, and

saw the patient again for a check-up March 5, 1941. She had been in continuous good health, without any signs of a recrudescence.

Lytic Reactions

I have mentioned the "lytic reaction" of the immune-blood. This manifests itself in certain local and general symptoms during the course of the treatment. In cases of tuberculosis of the kidney, these symptoms usually appear in the form of cramps in the bladder (if this organ is also involved), increased urgency of urination, and leukocytosis. These reactions are generally followed by improvement of the condition, and can be minimized by careful and appropriate dosage.

In one case I was able to demonstrate the lytic effect of immune-blood by postoperative pathologic findings. The patient was a man 40 years old, whose chief complaint was urgency of urination for several weeks and slight fever. He also gave a history of earlier pains in the right kidney. His urine was turbid, with strong traces of albumin and many pus cells and acid-fast bacilli in the sediment.

After the first injection of immune-blood, the urgency of urination and the turbidity of the urine increased and his temperature and pulse rate became higher. These symptoms were repeated after the second and third injections, whereupon the patient apparently lost confidence in the treatment and decided on operation.

I witnessed the operation and was given an opportunity to examine the removed kidney. The pathologic examination showed several cavities, ranging from the size of a bean to that of a walnut, and several disseminated tubercles were found. *Around all these foci, a prominent zone of strong hyperemia was evident, which could only be described as the result of the reaction caused by the liberated endotoxin of the dissolved bacilli.*

1018 East 163rd St.

THE FUTURE

Life in America fifty or a hundred years hence will not differ nearly as much from the life of today as the life of today differs from that of a century or even a half-century ago. The processes and techniques that have been responsible for the enormous changes of the past century will continue to improve our economic and social well-being, but the main changes will come from a more general understanding by the voting public of the nature of these processes and a more intelligent use of them. This will mean the gradual elimination of the effort to violate natural and social laws, or, arithmetically stated, the effort to make two plus two equal six, as we have been so ignorantly and so disastrously attempting to do in much of our social floundering of recent years.—ROBERT A. MILLIKAN, in *Think*, May, 1939.

EDUCATION

Education is the gradual adjustment to the spiritual possessions of the race, with a view to realizing one's own potentialities and assisting in carrying forward that complex of ideas, acts and institutions which we call civilization.—NICHOLAS MURRAY BUTLER, in *Think*, Sept., 1940.

GOVERNMENT

There is an important sense in which the Government is distinct from the Administration. One is perpetual; the other temporary and changeable. A man may be loyal to his Government, and yet oppose the peculiar principles and methods of the Administration.—ABRAHAM LINCOLN.

Notes from the A.M.A. Meeting

Reported by

GEORGE B. LAKE, M.D., Waukegan, Ill.

Those who could not attend the meeting of the A.M.A. this year will get some of the "feel" of it by reading this first-hand report. The summary of the panel discussion of prefrontal lobotomy, led by Dr. Freeman, is of especial and permanent importance.

THE ninety-second annual session of the American Medical Association was held in the Municipal Auditorium, at Cleveland, Ohio, June 2 to 6, inclusive, 1941. The weather was not too unpleasant and the meeting place was adequate. The registration of physicians was 7,194, and more of them than usual were present in the lecture halls and exhibits most of the time.



"Reflection," by Dr. E. E. Woldman

As usual, a number of specialistic groups were meeting more or less concurrently, and a good many luncheon and dinner meetings of fraternities, alumni, and other groups took place, including the dinner of the American Physicians' Art Association, about which more will be said presently.

The House of Delegates ground its usual grist of business, including the selection of Dr. Fred Wharton Rankin, of Lexington, Ky., formerly of the Mayo Clinic, as President-Elect of the Association, and the awarding of the Distinguished Service Medal to the notable pathologist, Dr. James Ewing, of New York, professor of oncology, Cornell University Medical School. The meeting places for the next three years were announced: 1942, Atlantic City, N. J.; 1943, San Francisco, Calif.; 1944, St. Louis, Mo. Dr. Frank H. Lahey, of Boston (see frontispiece), was installed as President of the Association at the opening general meeting on Tuesday evening.

American Physicians' Art Show

The fourth annual exhibition of the American Physicians' Art Association, sponsored by Mead Johnson and Co., was on view at the Masonic Temple from Monday morning until Wednesday night after the highly interesting dinner for the members of the Association, at which Dr. Max Thorek, of Chicago, was the principal speaker.

The show was not so large nor so well presented as it has been on the two preceding occasions, but was abundantly worthy of the attention of anyone having the least interest in art, and proved once more that the work of the amateur medical artists compares favorably with that of many professionals.

The Grand Prize gold cup, awarded by Dr. Thorek for the outstanding work of art in any medium, went to Dr. F. L. Knowles, of Fort Dodge, Ia., for his oil portrait, "Joan Knowles," and a special award to Dr. Edward E. Woldman, of Cleveland, O., for his bronze sculpture, "Salome" (I liked his "Reflection" better, and here is a picture of it).

The first prize for oil paintings went to Dr. Louis J. Karnosh, of Cleveland (I considered "The Presence," by Dr. Henry B. Mussina, of Williamsport, Pa., the most striking, and "Life Begins," by Dr. Louis J. Jack, of New Haven, Conn., the most significant and appealing, and here are photographic reproductions of them); for photography, to Dr. Donald W. Johnson, of Fairmont, Minn.; for ceramics, to Dr. Leon Goldman, of Cincinnati, O.; for



"The Presence," by Dr. H. B. Mussina

sculpture, to Dr. Robert N. MacGuffie, of Passaic, N. J.; for pastels, to Dr. Robert F. Ridpath, of Philadelphia, Pa.; and for etchings, to Dr. Joseph Warnaky, of Cincinnati.

Among the most charming things in the entire exhibition were three small aquatint color etchings by Dr. Nils P. Larsen, of Honolulu, Hawaii, which received honorable mention.

The Scientific Exhibit

The scientific exhibition was not so showy as it has sometimes been, but the 172 exhibits were unusually instructive and well arranged and uncommonly well attended. One could have spent the entire five days in this exhibition, without seeing it all, and have gone home far wiser and better posted than when one came. A valuable innovation was six small movie theaters, in which various exhibitors were showing pictures all day long every day.

The gold medal (original investigation) went to Drs. A. L. Berman, F. S. Grodins, and A. C. Ivy, of Northwestern University, Chicago, for their demonstration of the rationale of bile-salt therapy; the silver medal to Drs. H. T. Hyman, W. Leifer, and L. Chargin, of New York, for their massive-dose treatment of syphilis by the intravenous drip method; and the bronze medal to Drs. W. M. Boothby, W. R. Lovelace, C. W. Mayo, and A. H. Bulbulian, of the Mayo Clinic, for their showing of the physiologic problems of aviation.

In Group II (excellence of presentation), the gold medal was awarded to Drs. W. Walters, H. K. Gray, and J. T. Priestly, of the Mayo Clinic, for their exhibit on cancer of the stomach; the silver medal to Drs. G. C. Penberthy and C. N. Weller, of Wayne University College of Medicine, Detroit, Mich., for their splendid series of color photographs illustrating the treatment of burns; and the bronze medal to Dr. G. V. Brindley, of Temple, Tex., for his showing of factors in the cure of cancer of the colon.

The two large educational exhibits, subsidized by the A.M.A. ("Fractures" and "Lame Backs"), were both well and continually attended, especially while demonstrations were in progress; but the large legends and diagrams in all of the various booths of these two exhibits furnished excellent material for study at all times. Typical legends from both these exhibits are presented here.

LAME BACKS

Backache is not a disease: It is a symptom.

Inspect the patient standing, in a good light, back, side, and front.

Look for discrepancies in posture in the lame back patient.

A normal spine has free motion.

Don't guess. Check the diagnosis. Don't wait for someone else to do it. X-Ray the painful back!

A negative x-ray examination is important in making a diagnosis.



"Life Begins," by Dr. L. J. Jack

FRACTURES OF THE ANKLE

Reduce foot displacement immediately. Do not wait for swelling to subside.

Hold reduction in a padded plaster splint.

Ankle dislocation without fracture is rare.

Use a general anaesthetic for reduction of fractures.

Flex the leg on the thigh during reduction, to relax the calf muscles.

Employ early active movement and late weight-bearing after ankle fractures.

Nearly one-fifth of ankle fractures show lateral displacement and have also fracture of the posterior margin of the tibia.

Juries are awarding damages for failure to take x-ray pictures of fractures.

Take x-ray pictures before and always after reduction of all fractures.

Be certain that deformity in both planes is corrected after ankle fractures.

One of the most interesting exhibits was that of the *Adtevac Process* for the mass production of *desiccated blood plasma*, by Drs. Hill, Muirhead, Ashworth, and Waters, of Baylor University Hospital, Dallas, Tex. (See Fig. 1), showing the actual operation of a plasma center, where the plasma is separated, filtered, dehydrated from a frozen state, and the desiccated plasma introduced and vacuum sealed in containers. At the time of this meeting, 250 gallons of blood had been converted into desiccated plasma.

The exhibit by Drs. John Fallon, J. T. Brosnan, and W. G. Moran, of Worcester, Mass., "*The Candid Camera Applied to Medicine*," was fascinating to every camera fan. It showed how the miniature precision camera using 35 mm. film, with certain attachments, can be made to bring simple, clinical color photography within the reach of any physician who can afford one of these rather expensive little pieces of apparatus, and demonstrated the integration of standard camera accessories with each other and with home-made devices for photography in the office, the ward, the operating room, and the laboratory, including macroscopic, microscopic, and endoscopic photography. The accompanying picture (Fig. 2) shows, in the foreground, a home-made truck, with mountings for the camera, lights, and other pieces of apparatus; and, in the background, the astonishingly wide variety of pictures that can be produced. Those who are *practically* interested in this work will do well to write to Dr. Fallon, at the Fallon Clinic, for a copy of the valuable brochure, "*The Doctor as a Photographer*."

Dr. Clarence J. Gamble and R. L. Brown, of 255 Adams St., Milton, Mass., presented full details for testing the spermicidal times of various **commercial contraceptives**. All physicians who are giving their patients information on planned parenthood (and that should include all general

clinicians) will show good sense if they write for a copy of the valuable folder describing the properties of the ideal chemical contraceptive and the specific results of the tests applied to most of the preparations of this type now in general use. It will obviate many errors of judgment in prescribing.

There were several exhibits showing the modern treatment of burns, but the best one was that of Drs. Penberthy and Weller, which received the

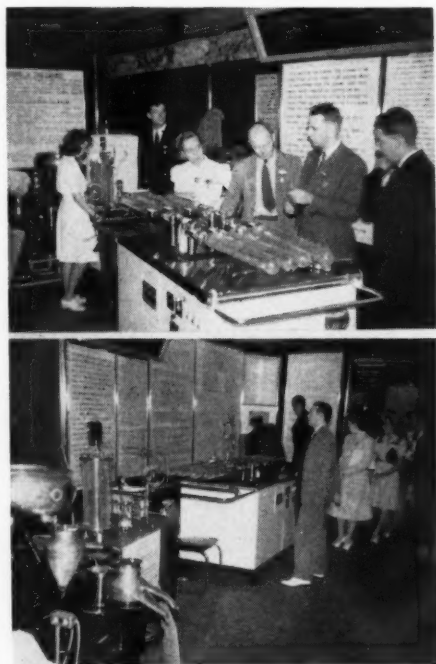


Fig. 1: Two views of the Adevac apparatus for desiccating blood plasma.

second prize in Group II. It will be a good plan to write to Dr. Grover C. Penberthy, Children's Hospital, Detroit, Mich., for a copy of their brief and practical brochure, "Treatment of Burns," from which the following summary of technic is taken:

Treatment of Burns

1. Sedatives (Codeine for children; morphine for adults) are ordered upon admission and repeated as indicated. Appropriate treatment of shock is administered.
2. Burned areas are thoroughly cleaned with green soap and peroxide and washed with alcohol or ether.
3. Necrotic skin and deep tissue is removed. All blisters are opened.
4. The surrounding portion of the body, not burned, is rapidly cleansed, using soap and water.
5. Sterile pack is opened and patient placed on a sterile sheet.
6. Tannic acid solution (5%) is sprayed on the burned area. A 10-percent solution of silver nitrate is then applied with a cotton sponge or applicator until a thick, pliable eschar is formed.
7. The bed is prepared with a warm sterile sheet. An electric cradle with sheet cover (burn

tent) is placed over the patient. The temperature in the tent is maintained at 85°-90° F.

8. The treated area is frequently inspected for spots of moisture. These are dried with a warm-air blower or an electric lamp and sprayed with the tannic acid and silver nitrate solutions till a satisfactory coagulum is formed. A moist area permits the entrance of bacteria and the development of infection.

9. Tannic acid jelly may be applied to burns of the face, and to body burns if the solution is not available.

10. The tannic acid eschar is trimmed away as separation occurs.

11. Gentian violet solution (1 or 2 percent) followed by silver nitrate (10 percent) may be substituted for tannic acid and silver nitrate in certain types of cases.

12. Gentian violet solution is applied to cracks appearing in the tannic eschar or about the edges if separation occurs.

13. The tannic coagulum should be left intact for a period of two weeks if possible, as disturbance of the eschar may result in a serious state of toxemia.

14. If serious infection develops under the coagulum, surgical removal is necessary.

15. After separation of the coagulum in extensive third-degree burns, the application of Dakin's solution in half strength, boric acid solution, or physiologic saline solution may be indicated to prepare the surface for skin grafting, which is done under Sodium-Pentothal anesthesia.

One could go on indefinitely describing the instructive exhibits, but these are some highlights of the material most widely useful to general clinicians.



Fig. 2: Outfit for clinical photography, and its results.

The Commercial Exhibit

Here, again, one is embarrassed by the wealth of valuable material from which selections must be made (there were 242 exhibits in this section), but as usual (subject to the human limits of time, knowledge, and energy), I have tried to pick out a few of the newest things and those of most general interest.

To me, the exhibit which seemed to offer the greatest promise of wide usefulness was that by the Westinghouse Electric Co., of their apparatus for taking photographs of fluoroscopic images of human chests on 35 mm. film with a small candid camera (see Fig. 3). These films are then examined rap-



Fig. 3: Apparatus for inexpensive mass surveys of chests.

idly, in small, magnifying viewing boxes, either binocular or plain, the simple ones, however, having lenses of such a size that both eyes are used and considerable stereo effect is obtained.

The sole or chief purpose of this apparatus is for making rapid, mass surveys of a large number of people. The small films are, of course, not adequate for making an accurate diagnosis, but they will locate the individuals who require more elaborate study, and are so inexpensive that the factor of cost becomes a minor matter, in view of the advantages afforded.

The *thiocyanates*, in the hands of many physicians, are giving good results in the treatment of hypertension, and the chief reason why they are not used more widely and successfully is that the only safe and reliable index of sufficient doses is the concentration of the drug in the blood, the determination of which has, heretofore, been a somewhat complex laboratory procedure.

A kit for blood thiocyanate estimation, so simple that any general clinician can make the test in a few minutes at a cost of about 5 cents, and small enough to be carried conveniently in the handbag, is now made available by Eli Lilly and Co., Indianapolis, Ind., who will send details to any physician who writes for it, mentioning CLINICAL MEDICINE.

The Abbott Laboratories are putting out a multiple vitamin capsule, known as "*Dayamin*," that really packs a wallop. One capsule contains the complete daily vitamin requirements for an adult. The cost may seem high, but compare the quantities of the ingredients with the prices of other similar products, and with food prices, to give the same vitamin content.

A new kind of bread, made from flour containing all the vitamins and minerals found in whole-wheat bread, but almost entirely freed from the roughage that is harmful to many people, is known as "Staff." It is now available in many of the better

food stores, and is worth looking into.

Since malt extract is one of the good sources of the *Vitamin B complex*, it seems a sound idea to use it as a vehicle for more potent preparations of this complex, and at least two firms—Borcherdt, of Chicago, and the Maltine Company—are now doing this.

The shock treatment of schizophrenia and other psychoses is now rather thoroughly accepted, but the dangers inherent in the use of insulin and Metrazol for this purpose are generally recognized and fairly well understood.

It is now possible to produce epileptoid convulsions with an accurately measured voltage of electric current, delivered by a special apparatus known as the Electro-Shock Equipment (see Fig. 4). Two



Fig. 4: The Electro-Shock Equipment.

great advantages of this method are the accurate measurement of the convulsant dose, and the fact that it produces insensibility immediately, so that there is complete amnesia for the convulsive episode, thus eliminating one of the chief objections to Metrazol treatment.

John Wyeth and Brother exhibited, along with their excellent pharmaceutical products, the third of Dean Cornwell's magnificent series of paintings of *Pioneers of American Medicine*, titled "*Conquerors of Yellow Fever*" (the first of the series was "*Beaumont and St. Martin*," and the second "*Osler at Old Blockley*"). The picture was unveiled by Miss Blossom Reed, daughter of the famous Major Walter, in the presence of the outgoing and incoming presidents of the A.M.A., and Sergeant John R. Kissinger, (Medal of Honor), the first soldier who volunteered for the epoch-making experiments of Reed, Agramonte, Lazear, and their coworkers.

Here follow abstracts of a few of the more generally practical clinical papers read at the various sessions.

UNILATERAL NEPHRECTOMY IN HYPERTENSION

By Roy W. Scott, M.D., Cleveland, Ohio

IN ESSENTIAL hypertension, the kidneys are the source of the trouble in many cases, and in patients whose kidney disease is unilateral, the high blood pressure can be relieved by nephrectomy, if the other kidney is normal in structure and function.

A typical case was that of a young woman of 22 years, and occurred following pregnancy. Her blood pressure was 200/110, and she developed retinitis of such severity that she was almost totally blind, as well as severe headaches and other symptoms. Kidney function tests were normal and there was no nitrogen retention.

Pyelograms showed that the right kidney was nonfunctioning, so it was removed, after which the symptoms promptly disappeared, her blood pressure fell to 120/80, and she can now read large print.

Arteriosclerosis does not cause high blood pressure unless it affects the kidneys, causing hypertension due to renal ischemia.

THIOCYANATES IN HYPERTENSION

By Drs. M. H. Barker, H. A. Lindberg, and M. H. Wald, Chicago, Ill.

WHEN the usual physical, drug, and psychotherapeutic measures fail to reduce hypertension, try potassium thiocyanate, under careful control by testing the concentration of the drug in the blood every day or two. The daily dose should be 5 grains (0.325 Gm.) for 3 or 4 weeks, decreased if the blood pressure falls sharply or symptoms of toxicosis appear, and doubled, after 2 or 3 weeks, if the blood concentration of the drug does not reach 6 mg. percent. Mild symptoms, especially the psychic ones, subside after a few weeks of this treatment.

Best results are obtained in patients of the plethoric type, where the red blood-cell count is high and the sedimentation rate slow. Some patients do not respond to this drug at all, and it is of little value in anemic patients with a rapid sedimentation rate (malignant hypertension) or in those with a failing heart. In cases of the latter type, the heart condition should be treated first.

In the patients we have treated in this way, significant and sustained reductions of the blood pressure have occurred in more than 50 percent, and in more than 70 percent there has been symptomatic improvement (in 50 percent, relief of all symptoms, with reduction of the blood pressure and concentration).

The doses must be adequate, but not too large, and can be regulated only by frequent determinations of the blood thiocyanate content. We have had the best results with concentrations between 8 and 15 mg. percent, and have seen severe toxic symptoms if the level exceeded 20 mg. percent. When the hypertension and the symptoms are satisfactorily controlled, the maintenance dose for each individual patient must be carefully determined and regularly administered.

ESTROGENS IN GYNECOLOGY

By E. C. Hamblen, M.D., Durham, N. C.

THE rational indications for the clinical use of potent estrogens, which is strictly substitution therapy, are: Complementary treatment in ovarian failure; for local effects on the vaginal epithelium in childhood and senility; local therapy of undeveloped breasts, without other signs of ovarian deficiency; and as antagonistic therapy in overactivity of the pituitary and adrenals.

The success of substitution therapy is limited by the expense, the prolonged duration of treatment, and the regressions that follow the cessation of treatment. Complementary therapy is successful in menopausal symptoms and certain forms of intercurrent and partial ovarian failure. Estrogens are

of practical value in vaginitis, because their local effects do not require maintenance.

Discussion

By Ludwig A. Emge, M.D., San Francisco, Calif.

Androgens are more reliable than estrogens in hemorrhagic conditions of the uterus, but they may cause distressing masculinization.

By Charles Mazer, M.D., Philadelphia, Pa.

The use of androgens in gynecologic practice should be limited to cases of premenopausal irregularities.

In giving estrogens successfully, the dose must be 5,000 rat units (25,000 international units) or more every 4 days.

By James B. Hamilton, M.D., New Haven, Conn.

Androgens, when given to women, produce definite extragenital effects: They diminish fatigue, increase the basal metabolism and pulse rate, and cause far-reaching vascular changes.

By U. J. Salmon, M.D., New York City

On the basis of 420 gynecologic cases treated with androgens, I am sure that they need rarely cause masculinization. The threshold level for this effect is generally 500 mg. or more, while therapeutic doses run from 50 to 300 mg. Moreover, morphologic evidence in the vaginal smear precedes masculinization, and the treatment can be stopped before this condition occurs.

I have seen no evidence of carcinogenic effects from these products.

SUDDEN DEATH IN HEART DISEASE

By Drs. George V. Leroy and S. S. Snider, Chicago, Ill.

PATIENTS with coronary disease rarely die instantaneously, though such deaths may be "sudden." Even where the textbook symptoms have not been obvious, there is a longer or shorter period when unmistakable, but mild, symptoms, such as substernal oppression, dyspnea, fatigue, and digestive disturbances, are present, and clinical and electrocardiographic evidence of infarction can be found if looked for. Myocardial damage sufficient to cause congestive heart failure need not, necessarily, have occurred.

This seems paradoxical, but we believe it can be explained by the facts that the coronary artery need not be suddenly and completely occluded in order to cause an infarct, and that early and sudden death, in these cases, is not due to myocardial failure, but to ventricular fibrillation, caused, in susceptible individuals, by generalized myocardial ischemia resulting from reflex vagal vasoconstriction in the nonoccluded branches of the coronary arteries. The stimulus that sets off this reflex comes from the myocardial infarct.

Scarlet Fever Contacts

By Drs. P. S. Rhoads, W. H. Tucker, and B. Rappaport, Evanston, Ill.

IN THE Cook County Contagious Hospital, Chicago, and in Evanston, 23.3 percent of 1,518 consecutive cases of scarlet fever that were studied were transmitted by family contacts. Since the present quarantine regulations in Illinois do not include the blood-agar plate test, they are inadequate to prevent the spread of the disease, especially in homes.

The measures recommended by the Dicks for the prevention of the spread of scarlet fever include skin tests for susceptibility and blood-agar plate

TABLE I
PRESENT STATUS OF PATIENTS WITH PREFRONTAL LOBOTOMY

Disease	No.	Regularly Employed	Studying or Partially Employed	House-Keeping	At Home	Institution	Dead
Involuntional Depressions	38	4	3	12	11	4	4
Obsessive Tension States	18	7		7	2		2
Schizophrenias	12	3	3	1	3	1	1
Psychoneuroses	8	4	1	1	1	1	
Undifferentiated (Schizoid)	4	2		1	1		
Totals	80	20	7	22	18	6	7

TABLE II
RESULTS IN PREFRONTAL LOBOTOMY

Disease	No.	RESULTS			DEATHS	
		Good	Fair	Poor	Operative	Subsequent
Involuntional Depressions	38	24	10	3	1	3
Obsessive Tension States	18	14	1	1	2	
Schizophrenias	12	6	4	2		1
Psychoneuroses	8	6		2		
Undifferentiated (Schizoid)	4	1		3		
Totals	80	51	15	11	3	4

cultures on all contacts; passive immunization (with antitoxin) of those who seem about to develop the disease; and, later, active immunization (with toxin) of these and all other susceptible contacts.

In 117 consecutive cases in private practice, in which we have used these measures, no "contact" cases have appeared.

SURGICAL TREATMENT (PREFRONTAL LOBOTOMY) IN MENTAL DISORDERS

A Round-Table Discussion

Statement By Walter Freeman, M.D., Ph.D.,
F.A.C.P., Washington, D.C.

IN 1936, Moniz, of Portugal, suggested the surgical interruption of certain pathways in the white matter of the frontal lobes of the brain as a treatment for certain neurotic and psychotic states, especially those associated with severe anxiety, agitation, and obsessions. The same year, Freeman and Watts introduced it into this country, and the next year they reported their preliminary observations.*

Since then, a number of others have taken up the work, and several of these are here today to report and discuss their experiences, as well as at least one who is not in full agreement with our conclusions. The discussion among the members will be free and conversational.

*See CLIN. MED. & SURG., Feb., 1937, p. 69, for an early report of this work.

Dr. Watts and I have treated 80 patients by this method, and our results are shown in Tables I and II. We still feel that the best results are obtained in *involuntional depressions* and *obsessional psychoses*,† though they have been reasonably satisfactory in other conditions.

We have made a number of modifications in the operation, the present technic being diagrammatically outlined in Fig. 5. The white fibers are cut in the plane of the coronal suture, and not elsewhere.

When patients have delusions, these persist for a time, subsiding gradually, but the *emotional impact* of the delusions on the personality is greatly diminished, or lost entirely, immediately after the operation.

The cortex is not affected, but the thalamus atrophies. The patient's *intelligence* is *not disturbed*—he merely *loses interest in himself* and his feelings, exercises less social restraint than formerly, and is apt to be somewhat garrulous and more outspoken than is always pleasant. His emotions are still aroused by external events, but no longer by his subjective anxieties and delusions.

Question, By Dr. Paul C. Bucy, Chicago
(Moderator)

Have you had any operative accidents?

Answer, by Dr. Freeman

In 2 cases hemiplegia appeared after the operation, but both cleared up after a time.

†Dr. Freeman showed a convincing moving picture of one of his patients, before and after operation.—G.B.L.

Statement by James G. Lyerly, M.D., F.A.C.S.,
Jacksonville, Fla.

At our hospital we have now performed prefrontal lobotomy on 44 patients, but in 5 the operation was so recent that they are not included in this report.

Of the remaining 39 patients, 18 are markedly improved; 10 are moderately improved; 18 are employed and earning their livings.[†]

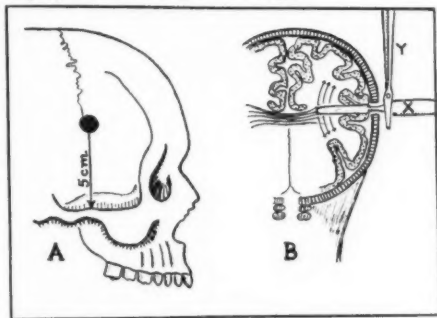


Fig. 5: Diagram of the present technic of Prefrontal Lobotomy. "A" shows the location of the trephine opening on the skull (5 cm. above the zygoma, on a line with the coronal suture); "B" shows a transverse section of the brain at the plane of the coronal suture, looking forward; "X" represents a Killian periosteal elevator (such as is used in submucous septal resections), with a blade 5 cm. long; "Y" represents a hemostatic forceps clamped on the shank of the elevator as a "sight" to keep the blade strictly vertical and in the plane of the suture, and to prevent the instrument from penetrating too deeply. The handle of the resector is gently moved down about 15°, and then up to the same extent, and the blade is withdrawn. Dotted lines show the area in which the white fibers are severed.

In these cases there have been no serious complications (though three patients had slight convulsions at the time of operation), and no deaths. Blood pressure is not increased by this operation, which we do by the open method (not the leukotome) through a trephine opening. All patients gained weight—one gained 97 pounds. (Dr. Freeman commented that this gain in weight was due to the fact that the patients were enjoying their bodies—again or for the first time—and experiencing a general sense of Euphoria).

Statement by M. A. Tarumianz, M.D.,
Farnhurst, Del.

Our work was done in a State Hospital for mental cases, and all the 10 patients we have operated upon were deteriorated, depressed, disturbed, and obsessed (2 were suicidal), and had been so for many years. All had had extensive courses of shock treatment with Metrazol or insulin or both—one patient had had more than 30 Metrazol convulsions. Without prefrontal lobotomy, they were hopeless cases, and were chosen for this treatment for that very reason. None of the patients we have operated upon has been amenable to any type of psychotherapy.

One of our patients had a postoperative hemorrhage and died (a 10-percent mortality)*; one died 2 years after the operation, not as a result of it; 7 are fully adjusted socially and are living at home (2 are working in offices); and one is in good condition but still in the Hospital because he has no home to which we can send him.

[†]Moving pictures of a number of these patients, before and after operation, were shown, and constituted unquestionable clinical evidence.—G.B.L.

*Dr. Freeman's operative mortality rate was only 3.7 percent (see Table II).—G.B.L.

Two of these patients were schizophrenics, one of whom had been badly disturbed and homicidal for 6 years; the other had been mute for 9 years. Both were behaving normally within a week or two after the operation.

Incidentally, after having had experience with both, I am convinced that Metrazol shock is a decidedly more drastic treatment than prefrontal lobotomy.

The Economic Aspect

In all institutions sustained by taxes, I believe that all patients who are suitable for this operation should have it, on an economic basis, if no other.

Patients of this type often live for years and years (if one can call it *living*), and every year the care of every such patient costs the taxpayers \$250. We have in our hospital 180 patients whom I now consider suitable for this operation. If we operate upon all of them, 18 might die, on the basis of our meager figures (and that might be a blessing for most of them). On a decidedly conservative estimate, 90 of them could be sent home, socially adjusted. In 10 years, this would save the State (taxpayers) \$350,000.

Comment by Dr. Freeman

A schizophrenic stops feeling like a precocious patient immediately after prefrontal lobotomy, though he behaves like one for a while. Later, these "vegetables" become human.

Those who argue that by sending these patients home we merely transfer the burden from the State to the patient's family, are simply misinformed. These people are not a care to their families. They are able to carry their share of the domestic work and responsibility.

All of the patients reported by Dr. Tarumianz, and most of the others reported here today, had received all other recognized forms of treatment without success, before the operation was performed. The results are too prompt to be the result of psychic factors; and moreover, the operation does not always work the first time, but succeeds on a second attempt.

Statement by Theodore C. Erickson, M.D.,
Montreal, Can.

Montreal Neurologic Institute

At our Institute we perform complete, frontal lobectomy, instead of prefrontal lobotomy. The removal of one frontal lobe does not always prevent psychic stress, and where necessary we have operated on both sides.

Several patients from whom both frontal lobes have been removed behave normally at home, except that they are apt to be somewhat tactless and unself-conscious. After the loss of one frontal lobe the patients appear normal to every known test, and are intellectually keen.

An interesting result of this work has appeared in 7 patients with severe epilepsy, who, after each seizure, went into psychotic states (not just the usual and rather transitory dazed and confused condition) for two or three weeks. The removal of scars in the frontal lobes—possibly "epileptogenic areas" (?)—has stopped all epileptoid symptoms. One patient who had had seizures for 9 years, never had another after frontal lobectomy.

Statement by H. D. Palmer, M.D.,
Philadelphia, Pa.

In my experience, patients suffering from melancholia have showed 75 percent of improvement following Metrazol treatment, and 85 percent after Electric shock treatment.

I have performed prefrontal lobotomy only on patients (5 cases) who were apparently hopeless, deteriorated schizophrenics—violent, suicidal, and destructive—whose malady had been present for an average of ten years. These patients had *not been neglected* before the operation, but had been given active attention in various ways, including psychotherapy, if or when this was possible.

One patient, 35 years old, had been given the narcosis treatment; 80 insulin injections (producing 45 comas); and 18 Metrazol convulsions, without any noticeable benefit. This patient had had *no intellectual life whatever* for seven years, and had made three suicidal attempts.

Following prefrontal lobotomy, he is now living normally, except for slight forgetfulness of minor matters and an imperfect sense of time (he interprets his *twelve* years of psychic illness as having lasted *one* year). He has gained 40 pounds in weight, is up to his prepsychotic intellectual level, and is learning new crafts and ideas.

Two patients, who were previously violent, suicidal, homicidal, incontinent, destructive, etc., and who had been treated with narcosis, insulin, Metrazol, and other methods without benefit, are now entirely cooperative, reasonable, and comfortable, but are *living at a simple level* and are easily distracted from such fantasies as still remain. *Reeducation* should follow all lobotomies.

Another patient of the same general type has gradually *regained previously lost skills* (painting, sculpture, etc.) following lobotomy. Her desires are spontaneously simple, but in conversation she reaches nearly her prepsychotic level. She interprets her fourteen years of illness as having lasted one year or less.

The fifth patient, who is now gainfully employed, married, had a child, and now seems fully normal.

In my opinion, one should wait a full year after prefrontal lobotomy before estimating the improvement made.

Two of these patients who, before they became psychotic, were obviously selfish and manifested asocial tendencies, are now generous and actively helpful.

I feel that we should recommend lobotomy on the basis of a syndrome of *violent symptoms*, rather than some diagnostic label.

Comment by Dr. Paul Bucy, Moderator

Those who have listened to these statements might get the impression that this Panel has been "stacked," but I assure you that this is not the case. We have made sincere efforts to have the other side presented, but those who, in conversation, oppose this form of treatment have almost uniformly refused to express their opposition in public. We will now hear from the one exception (in our experience) to this rule.

Statement by Roy R. Grinker, M.D., Chicago, Ill.

I am inclined to think that there is a certain amount of emotional bias on both sides of this subject. Convulsive shock, caused by Metrazol or electricity, is certainly not *psychologic* treatment.

The *degree* of a patient's anxiety is hard to estimate accurately, and personality defects are difficult to measure. Defects of association and abstraction are clear enough, but not those of initiative and creativeness.

There has not yet been time enough to show the possible effects of *late scarring*, which may be a cause of epilepsy in these patients.

The explanation offered by the advocates of this

operation is that the prefrontal lobes have some function in connection with excessive anxiety. Civilization has developed at a heavy cost of inhibition of natural instincts, resulting in inner conflict and anxiety which *may* become pathologic; but a moderate amount of anxiety is a stimulus to effort. The rational basis for the relief of anxiety is psychologic, but such treatment is long, tedious, and costly.

Lobotomy is not reversible, nor wholly controllable. The operation is, no doubt, useful in certain cases, but the indications for it are not fully clear. The method is still experimental and should not be given to the public at present.

Closing Comments by Dr. Freeman

The trouble with the patients reported in this discussion has not been intellectual, but *emotional*.

An inventor was unable to complete the details of a new device because of his preoccupation with his emotional distress. After lobotomy he worked it out and obtained a patent—but attributed his cure to eating raw carrots.

Practically all of the patients discussed today were those who *could not be reached by any rational methods of psychotherapy*.

Moderate personality defects, such as those reported in these cases, especially aberrations of the time sense, have been known to follow shock treatments.

In 200 cases, following shock therapy, there were 6 suicides. So far there has not been one following lobotomy.

AMMONIUM CHLORIDE IN PREMENSTRUAL DISTRESS

By Drs. J. P. Greenhill and S. C. Freed, Chicago, Ill.

FIFTY (50) women, suffering with so-called premenstrual tension, were given *ammonium chloride*, in doses of from 2 to 4 Gm. daily, during the last 10 to 14 days of the menstrual cycle, and they were also advised to refrain from taking any sodium salt (chiefly sodium chloride) with their food or otherwise.

The relief from premenstrual distress was, in many cases, dramatic, and our results have been almost uniformly successful.

Our hypothesis is that these symptoms are caused by an increase of the extracellular fluids in the various tissues and organs, resulting from the fact that the ovarian steroidal hormones, which are increased during the latter half of the menstrual cycle, cause retention of sodium. This tissue edema is relieved by substituting the sodium ions with ammonium.

ADRENAL HORMONES IN PRACTICE

By Frank A. Hartman, M.D., Columbus, O.

THE adrenal secretion plays an important part in the balance and shifts of water and electrolytes in the body, by its regulation of the permeability of membranes. It also has a distinct influence upon metabolism, especially that of carbohydrates.

Adrenal preparations not only control the symptoms of Addison's disease, but also have a definite value in the prevention, and possibly in the relief of shock, in the treatment of severe burns, and in the favorable progress of some forms of asthenia following acute infectious diseases.

I am personally convinced that the use of whole, natural adrenal extract is safer and more sound, physiologically, than the administration of desoxycorticosterone.

PREMARITAL MEDICAL CONSULTATION

By Robert L. Dickinson, M.D., New York City

AN EXAMINATION as to fitness for marriage should mean far more than a test of the blood for syphilis and a cursory inspection for the presence of gonorrhea. It should include a study of the family history for the presence of inheritable diseases; of the personal history, not only for physical diseases, but also for psychic tendencies and patterns; and a complete general examination, including the conformation and functions of the genital organs.

Preventive medicine is rapidly taking precedence over curative medicine, and people expect physicians to prevent disorders that are preventable. Divorce is a social disorder (and frequently also a personal one), and can, in most cases, be prevented by proper and adequate instruction and training of the young couple before marriage. The frankness of youth is amazing, but its ignorance is appalling.

The successful premarital consultation requires a physician who is trained in its technics, and must be thoroughly individualized. It should include a study of the hereditary factors on both sides; of the training, knowledge, and adaptability of both the young people; and of the probability of their ready adjustment to the sexual relationship and to child bearing. Instruction should be given as and where it is needed, and a thorough working knowledge of the technics of contraception is the only sure path to planned parenthood, which is a powerful prophylactic against divorce.

This country is not yet ready for the legal enact-

ment of such ideal premarital requirements, but the medical profession should be educating the people to the point where such examinations become the voluntary custom of all reasonably civilized people. Only then can such measures be safely enacted as a legal code.

DIET IN ACNE

By Richard L. Sutton, Jr., M.D., Kansas City, Mo.

ACNE is a manifestation of the body's failure to metabolize fats, as diabetes shows a similar failure to handle carbohydrates, and can be controlled by reducing the amount of fat in the patient's diet, with the addition, in many if not most cases, of carefully regulated doses of thyroid.

The low-fat diet should be adequate in water, minerals, protein, calories, and vitamins. Milk, cream, butter, ice cream, pork products, egg yolks, fried foods, gravies, nuts, chocolate, and vegetable oils should be forbidden.

On this regime, mental depression and fatigability begin to diminish within a week, and objective improvement, including a loss of from 5 to 10 pounds in weight, should be seen within a month, especially in those who have formerly used much milk.

The x-ray treatment of acne should not be attempted until after the dietary treatment has been given an adequate trial. These rays cannot remove fat deposits from the skin glands; they can merely destroy the glands, and that will not permanently prevent oiliness of the skin unless the metabolism of fats is regulated.

Medical Regimentation

By

LANNING E. LIKES, M.D., Lamar, Colo.

THE problem of medical care is woven into the fabric of our economic life. Medical service, like a commodity, has its cost, of course. Each year the people of the United States expend three and one-half billion dollars and more for medical services and medical goods. The hospitals in the United States represent a capital investment of three billions of dollars, and the education, training, and physical equipment of medical practitioners represent three billions more. The provision of medical care has become one of the largest and most important of our activities.

In the past half-century there have been great advances in the field of medical care, and developments also in opinions on the distribution and payment for medical services. One such development is the proposal for socialized or politicalized medicine which, in fact, is medical care at the expense of the man who pays taxes on real estate, income, or business. It is the government in the business of medicine, just as it has gone into housing, railroads, insurance, loans, and some thirty other enterprises. A bill introduced by Senator Robert F. Wagner, of New York, a labor union Senator, would implement this plan.

It has been said that the government began its program when it started its work on venereal diseases. The Wagner Socialized Medicine bill has been resting in the Committee on Labor for more than a year, presumably awaiting the calmer period which may follow the war. It provides

that, in case of illness, a patient would be transported to a hospital, given a room or accommodation, and free drugs and medicines, all at the expense of the poor, overburdened taxpayer. He would be attended, without cost to him, by a junior physician paid \$2,000 a year, or by a senior physician who would be paid up to \$6,000, and nursing service, furnished by the taxpayers. All the patient would have to do would be to convince someone that he was ill.

In every country where such a plan has been tried it has filled the hospitals far beyond their capacity. It brings on a wave of illness that swamps the junior and senior physicians and all other facilities and results in poor care of the patients. One doctor cannot give attention to 200 patients a day, nor even 100, and do it as it should be done, as we all well know.

Socialized Medicine would politicalize, if not communize, a vital phase of American life. The last refuge of the human being who wants to be an individual is when he is sick. If the right to choose his physician is to be taken away from him, what has he remaining? Shall this become a nation of automatons, moving, breathing, living, suffering, and dying at the will of politicians?

Not one of the State Medicine plans in European countries is successful. Overcrowding in hospitals has taken its toll, and lack of proper care is a corollary.

Medical service, unlike cash or material com-

modities, cannot be collected, stored, and distributed without changing its qualities. Its value depends on the relations between the producer (the physician) and the consumer (the patient). The introduction of a third party, who is neither physician nor patient, is equivalent to adulteration of the service.

The donated services of physicians were estimated to be valued at \$350,000,000 a year, a few years ago. If there is truly any lack of good medical service today, for those who require it, the medical profession stands ready to supply the need, as it has in the past. What other profession has ever developed such a tradition of sacrifice for the public welfare?

By a widespread system of public hospitals and clinics, educational institutions and dispensaries, and willingness of physicians everywhere to give their services to those in need, anyone is able to get medical help for himself and family, when it is required. Enough money is expended on surveys to take care of all of the people they bring to light as lacking medical care. But the surveys go on and on, because it is the business of the economists, sociologists, efficiency engineers, and social service workers to make surveys, regardless of the antagonisms they arouse, the uses of propaganda to which they are put, and their excessive costs—far beyond the value of the results reported.

The bureaucrats say that this proposed State-administered Medicine will not be compulsory; but experience shows that the entrance of the State into medical practice breaks down the standard of the profession and of medical practice to such an extent that, in the course of time, no other system but the State system is really available for the average man. We must not be misled by the use of the word, "available." It is typical

of the insidious character and the golden promises of those who deceive the public and who lead them to change their true gold for the politician's dross.

Instead of reducing the cost of medical service, Socialized Medicine has loaded that cost with a crushing burden of administrative expense. Under none of these State-administered Socialized Medicine systems in European countries has medical service improved as fast, nor have as extensive preventive measures been applied, nor have as great reductions been made in morbidity and mortality as in the United States, with private medical practice.

Judged from 11 tests, the people of this country, where the practice of medicine is free and independent, are receiving better medical service than those in countries with any system of Socialized Medicine; and certainly in no country with such a system is there such constantly improving medical service as there is in the United States.

A deep, inherent evil in Socialized Medicine is the increase in mental disturbances among its so-called beneficiaries. Various studies have led to the conclusion that from 40 to 75 percent of all illnesses among participants in such service are complicated by mental disturbances, which require, for their relief, much time, patience, sympathetic understanding, and close, confidential, personal relations between the physician and his patient. These elements, necessary in the care of these difficult conditions, are destroyed by Socialized Medicine.

We must turn to Europe to find examples of the systems of medical practice created, administered, and controlled by legislation. Not one of these countries, not even Russia, has attempted to provide a "system of complete medical service to all citizens at the public expense."

THE CULT OF RESEARCH

Today, the deity of Medicine is a thing called Research—Organized Research—with its own priesthood and its own ritual. Novices in this priesthood must withdraw themselves from the crowd and follow a hard way. They progress from scholarship to fellowship, from fellowship to readership and professorship, which is a kind of bishopric. During this progress no man may contradict them but their peers or superiors in the priesthood, for they talk a special language not understood by the vulgar lay brothers who make up the bulk of the profession. They live in beautiful buildings full of shining and fragile apparatus. They are supported by grants, endowments and gifts of the faithful.

This was not always so; and occasionally there emerges a man who can think for himself.—DR. JAMES BRIDIE, in foreword to Adam's "Asthma and the General Practitioner."

TRAINING

In treating patients who have no demonstrable anatomic or physiologic pathoses, behavior must be considered, as there are habits of reaction which, if accentuated, constitute mental disorders. Where training is involved, the patient must cooperate actively. It requires a greater output of energy to change a type of behavior than to take a pill, or even to submit to an operation.

—SAMUEL N. CLARK, M.D., Jacksonville, Ill.

OUR DANGER

At what point, then, is the approach of danger to be expected? I answer, if it ever reaches us it must spring up amongst us; it cannot come from abroad. If destruction be our lot, we must, ourselves, be its author and finisher. As a nation of free men, we must live through all time, or die by suicide.

—ABRAHAM LINCOLN.

A Living for the Doctor

The Business of Medicine and the Art of Living

"Country" Practice

THERE is no "country" practice, but there are "country" practitioners. Whether one practises thorough, scientific medicine or not, is dependent upon one's enthusiasm and ability to keep on studying, rather than on the size of the city in which one is located.

The man who is far from a host of consultants and elaborate hospital and laboratory facilities has the opportunity to become a thoroughly competent physician or a careless one. He may realize that on him the responsibility rests of making an early diagnosis and carrying out indicated tests or treatment, or insisting that a specialist's help be obtained. In that case he will keep complete records, to aid in making a condition clear and to detect any changes to come in the future.

The general practitioner in the small town often complains that he lacks the stimulating contact with other men and specialists. If he would but realize it, he also lacks the pressure to follow waves of medical enthusiasm which are too frequently considered medical progress. Having no one to throw responsibility upon at all times, thus permitting his clinical sense to atrophy by shunting off all hard problems, he digs in and studies his cases. The "stimulating contact" he can and should obtain by travelling, at least once a year, to several medical centers, to watch patients being diagnosed and treated by men who have had wider experience than he.

R.L.G.

The Doctor's Legal Problems

SOME patients pay their doctor's bills promptly and without demur, a few even eagerly and gratefully, but too many are so selfish that they neglect and delay payment in an unbecoming and un-Christian manner, and now and then one will not pay until forced to do so.

When force is required, the Law comes into the picture, and the average physician (if there is such an animal) is as ignorant of the complexities of that appalling, man-made structure as a sucking babe, by reason of which he is frequently cheated out of what is due him by a fluke or a trick.

In order to remedy this blind spot, which we believe about ninety percent of our readers have,

we have arranged with an eminent and experienced jurist, who knows doctors and their problems and is eager to help the former in solving the latter, to write for you, in a simple, conversational style, in which the fictitious "Dr. Medico" is the chief character, a series of very brief and practical notes on various legal situations that may arise in any physician's experience. These are based upon *actual court rulings* and will be valid in most states, though not in all, at all times.

The author of these helpful suggestions prefers (for the present, at least) that his name be not used in connection with them, so they will be signed only with his initials (M.L.H.). But we know his standing and can vouch for the soundness of his statements.

If you like these "Problems of Dr. Medico" and want them continued, *tell us so* (a post-card will do) and we will keep them coming for some time.

G.B.L.

Keeping Records

A COMPETENT practitioner is known by the records he keeps. He knows that, if he *writes* the patient's story and his findings, he (1) will be less likely to neglect important questions or tests; (2) will consider more diseases more accurately in his differential diagnosis; and (3) will be able to see any change in his patient's condition quickly; and (4) will have a permanent record.

The physician can *teach himself* in his own practice, if he keeps accurate "box scores" of hits and errors, follows his patients, and looks up puzzling cases. He thus sees mistakes and does not repeat them; and also learns solid facts of diagnosis and treatment. When he comes upon unusual cases or works out new methods of diagnosis or treatment, his files will hold the proof of his contention and the material for study or medical articles.

He uses newer methods read in the literature and described at meetings, retaining those of value and discarding those which do not work out. He finds, to his amazement, that some of his diagnoses are as accurate, or more so, than those made at famous clinics. He realizes that he has a definite

place in the practice of medicine; that he is not a second-string physician, capable only of treat-

ing colds and minor ailments.

R. L. G.

Simple, Quick Urinalysis*

URINALYSES are often incomplete because the physician feels that he cannot spare the time for a longer procedure. The technic outlined here can be carried out in 3 minutes. If a nurse or office girl is available, she can be trained to carry out the tests for albumin, sugar, and specific gravity, so that the physician need only glance at the microscopic picture.

Equipment:† One electric bottle warmer (See Fig. 1); specific gravity hydrometer, with jar or cylinder; clean medicine droppers or pipettes; sulphosalicylic acid solution; Benedict's qualitative solution; test tubes, glass slides, and microscope.

Sugar Test

Pour enough Benedict's qualitative solution into a test tube to fill it to a depth of one finger's width; add four (4) drops of urine and place the tube in the automatic bottle warmer, where it will boil almost immediately. Time is thus saved and there is no danger of injuring fingers or equipment with a flame. This method of using only half as much solution and urine as has previously been advised results in quite a saving when many urinalyses are performed yearly. The urine should be left in the boiling water for 4 minutes before recording the result.

Albumin Test

Run enough urine into a test tube to fill one-half inch; add two (2) drops of sulphosalicylic acid solution and watch for the immediate appearance of cloudiness, which indicates the presence of albumin. If the specimen is cloudy before examination, pass it through filter paper in a small funnel placed in the mouth of the test tube. The cloudiness is graded or recorded as a trace, one plus, two plus, three plus, or four plus, to indicate the increasing cloudiness and amount of albumin.

Specific Gravity Test

A two-ounce cylinder is filled almost to the top with urine and the hydrometer is placed in it, rolling it between the fingers so that it will spin gently in the urine. A reading taken while it is spinning is more accurate than one taken when it is stationary, as it tends to adhere to the glass sides of the cylinder.

Microscopic Examination

With a pipette or medicine dropper, one sucks up two or three drops of the urine (including any sediment) from the specimen bottle and places

it on a glass microscopic slide. Blood cells, white or red, and casts are looked for. Crystals are rarely diagnostic. A drop of methylene blue or gentian violet solution permits cells to be seen more readily.

Other Tests

If the clinical picture or the previous examination shows any indication of urinary-tract disease, a relatively sterile specimen should be obtained, by catheterization or by urination after the glans penis is washed with cotton soaked in boric acid; the test for albumin repeated, and another microscopic examination made. A specimen may be sent to the nearest hospital laboratory for culture, to determine what type of bacteria are present. Smears may be stained and examined by the physician or by a pathologist.



Fig. 1.

Kidney Function Test

A normal kidney can concentrate urine to a specific gravity of 1.020 to 1.035 when all liquid is withheld for a period of 12 hours or more. The patient is instructed to take his usual supper at 6 P.M., with only one cup or glass of liquid; to eat nothing and drink no liquids until 7 the next morning; and then to save the 7 A.M. urine specimen in a waterproof cardboard container with a tight lid, such as is used to carry ice cream, or a bottle that has been washed out with boiling water. Slips with these instructions, to give to patients, can be printed cheaply. The specimen should be examined before 10:30 A.M.

If the concentration, tested with the hydrometer, is more than 1.022, at least one kidney has normal function. A specific gravity of 1.015 or less indicates renal disease.

R. L. GORELL, M.D.

Clarion, Ia.

Blood Grouping Tests in Criminal Cases

SINCE the blood group factors A, B, M, and N are highly resistant to drying, heating, and to the action of other physical and chemical influences, it is possible to detect their presence even in blood stains. Consequently the tests are of considerable potential value in criminal investigations.

The determination of blood groups in stains may be helpful under various circumstances. Stains may be found on the clothing of suspects, and their claim that it is their own blood may be disproved by finding that their blood belongs to a different group than the blood stain. Stains on the clothing

*This is the first of a series of brief articles on simplified office practice.—Ed.

†The electric bottle warmer costs \$1.00 and lasts for a year or more before needing replacement, if cleaned occasionally. It may be obtained from the Hanksraft Automatic Bottle Warmer Company, Madison, Wisconsin. The hydrometer and cylinder, together called a urinometer, may be obtained from any medical supply house. The current trend is away from the use of the centrifuge, because we now know that "normal" urine contains cells (see the work of Addis). The sulphosalicylic acid solution may be made up by any pharmacist or supply house (20 Gm. of powdered sulphosalicylic acid to 100 cc. of water).

of a victim may be similarly examined for the purpose of determining whether or not they are of a blood group similar to that of the blood of the victim or of the suspect.

Because of the potential value of blood grouping tests in cases of this nature, it is advisable that such tests be made of the blood from a victim so that, even after disposal of the body itself, the blood specimen would be available for comparison purposes, in the event such tests are later deemed necessary.

The presence of factors A and B in seminal fluid makes it possible to utilize the tests in rape cases. For instance, the blood group of seminal stains on the body or clothing of a victim may be determined and compared with that of a suspect. As in the case of paternity determination, however, the results can only prove exclusion, but the possibility of ascertaining such a fact in any given case is well worth the effort.

In somewhat the same manner, and also with similar practical limitations, group tests can be made of saliva. And there are records of successful determinations of blood groups in traces of saliva on gummed edges of envelopes and on cigarette stubs.—I. DAVIDSON, M.D., in *A. J. Police Sci.*, Jan.-Feb., 1941.

The Problem of the Obliging Boy

DOCTOR Medico came out to the sidewalk just as the red-headed boy sauntered by.

"Want to do an errand for me?" Doctor Medico queried.

"Sure," bricktop agreed.

"Give Tom Emery this statement of the amount of his note endorsed by Nozee Sipprelle that falls due today, and Emery'll give you his check in my favor to cover it," the doctor ordered.

"I haven't funds to cover this check today, but I will have day after tomorrow," Emery suggested.

"That'll suit the doctor all right," the boy agreed. He delivered the statement to Emery and the check to the doctor, who, for 3 days in succession, presented the Emery check at the bank, and for 3 successive times was told, "no funds."

"I'll have to sue you," the doctor told Emery. "If you had said you didn't have the money I would have renewed it, but I have no time to waste running to the bank on fool's errands."

"Sue away! I'm going into bankruptcy this afternoon."

"I'll have to sue you as endorser," the doctor told Sipprelle.

"I'm only the endorser," Sipprelle pointed out.

"Yes, that's why I'm looking to you."

"And the law is that an extension of time to the maker releases an endorser."

"I believe that's correct," the doctor agreed.

"Sure, and when your messenger boy accepted Emery's check, with notice that it wouldn't be paid that day, that was an extension of time to Emery that releases me from any liability as endorser."

"Yes, you're only the endorser, and if you hadn't taken that attitude I'd feel like giving you a substantial reduction, but we'd better see what Judge Enright says about it," the doctor retorted, and the case came to trial at the next term of the court.

"The doctor was not bound by any alleged agreement of the messenger to extend the time of

payment of the note. All he (the messenger) was authorized to do was to deliver the statement and receive payment. The case of *Settle vs. Browning*, 133 S.E. 769, is on 'all fours,'" Judge Enright decided.

M. L. H.

★ Books ★

The Unobstructed Universe

White

THE UNOBSERVED UNIVERSE. By STEWART EDWARD WHITE. New York: E. P. Dutton & Co., Inc., 1941. Price, \$2.50.

QUITE obviously, the old stabilities, upon which our fathers and grandfathers and their fathers before them worked, but which were jarred by World War No. 1, are now in process of dissolution, so that we must prepare for new conditions of living. But upon what basis? Here is a rational answer.

The reading people know Mr. White's work—his fine historical novels, based upon his deep study of history, or his distinguished travel books, based on his adventurous life, or both. But it is less widely known that, for a number of years, he and his keen vivacious wife have been adventuring even more widely—into the country "beyond the grave," where she now resides continuously, though she has found a method for reporting her individual experiences and discoveries clearly and directly. This remarkable volume contains reports of these experiences, with an account of the experiments that led up to them and the ways in which she identified herself to her friends in the flesh, beyond a shadow of doubt. It is one of the most fascinating "Personal Adventure Stories" that ever was published. So much so, indeed, that it reached its tenth printing five months after the first.

No thoughtful person, whatever his degree of belief or disbelief in the supernatural, can afford to miss the exciting and uplifting experience of reading this record, authenticated by a man of Mr. White's standing as a scholar, a traveler, and a writer.

A New Utopia

HOPOUSIA or The Sexual and Economic Foundations of a New Society. By J. D. USWING, M.C.Ph.D., (Contab.), Late (1914) Classical Exhibitioner, Oriel College, Oxford and (1918-1921) Fellow Commoner, Research Student, Peterhouse, Cambridge. New York: Oskar Pietsch, 1940. Price, \$4.00.

THE thesis of this volume is that, if restraint of the sex urge is practiced voluntarily, added somatic energy will be generated in sufficient quantity to keep a civilization at its high point indefinitely, if (and it is a big "if") the economic setup is such as to encourage and reward individual initiative. The body of the work goes into details as to how such a society would (or might) function. Aldous Huxley's scholarly and penetrating critical introduction clarifies the ideas enormously.

This is another set of specifications for Utopia, on a different basis from those outlined by Plato, Francis Bacon, Edward Bellamy, and several others. It is not intended for and will not please superficial thinkers or those who are looking for erotica, but serious students of the social sciences will find it immensely stimulating, even if they do not agree with all the ideas advanced.

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I am always glad to receive my copies of "C.M. & S." There is always "good pickings" in it and interesting articles.—D. J., Canada.



Problem No. 7 (Medical)

Presented by G. M. Russell, M.D.
Billings, Mont.

RECAPITULATION: A woman of 32 years, 5 feet 6 inches tall and weighing 95 pounds, complained that, for 2 years, she had had a "heavy" sensation in her stomach immediately after eating and continuing for 3 or 4 hours, and now had pain in her lower abdomen.

Examinations showed no abnormalities except abdominal tenderness; Kraurosis of the vulva; hemoglobin, 77 percent (red cells, 5,056,000); and achlorhydria (total acid, 70). Roentgenograms showed visceroptosis; slow emptying time of the well-filled gallbladder; and bile-stained, piled-up epithelial cells in the gallbladder drainage.

Requirements: State your diagnosis, giving reasons. Suggest treatment.

Discussion by W. B. Palmer, M.D.
Furman, Ala.

This woman was underweight, with achlorhydria, a high blood-cell count, pain, a "heavy sensation" immediately after eating (apparently in the region of the stomach), which continued intermittently for three or four hours, and tenderness over the lower abdomen.

Achlorhydria and gastric pains or "uneasiness" ("indigestion") may arise from extra-abdominal or intra-abdominal, extra-gastric or intra-gastric sources, more commonly extra-gastric. These causative factors may be systemic or local. My case records show that there is a tendency towards hyperchlorhydria in acute gallbladder conditions and hypochlorhydria in chronic states.

When abdominal pain or "uneasiness" occurs, we must keep in mind the appendix first, then the gallbladder, and finally, visceroptosis. With pain and uneasiness over the stomach, gastric and duodenal ulcers and cancer must be the first consideration. In such cases, a thorough examination of the gastrointestinal system may be essential before a diagnosis can be reached.

With a high red blood-cell count and hemoglobin 77 percent, we could, perhaps, eliminate all of the primary anemias, but idiopathic, hypochromic anemia can exist in the presence of achlorhydria or hypochlorhydria, and in many gallbladder conditions. Gastric ulcers never develop in the presence of achlorhydria, but I frequently find this condition in the presence of cancer in any other region of the body, especially the pancreas.

As the patient is underweight, one is led to believe that she is undernourished, due to eating insufficient food or inability to assimilate what she

The Seminar

Our readers are cordially invited to submit fully worked up problems to the Seminar and to take part in the discussions of any or all problems. Discussions should reach this office by the 5th of the month following the appearance of the problem. Send your problems and discussions to The Seminar Dept. care CLINICAL MEDICINE, Waukegan, Ill.

eats, or perhaps she has some disease that causes emaciation. The presence of bile in the intestinal tract is essential for digestion and for the utilization of many vitamins, such as fat-soluble vitamin A and vitamin K. The gallbladder must function properly, along with the liver, to sustain the patient. It is not a functionless, vestigial structure.

The blood picture shown by this patient sometimes appears in the early stages of cancer. The fact that nothing can be done leads one to make a "psychologic" diagnosis of cancer, perhaps of the pancreas, which progresses slowly. The gallbladder, appendix, stomach, and gastro-duodenal area are near neighbors, hence the consideration of one calls for the consideration of all.

My diagnosis is that the trouble is in the gallbladder or originated there. If that be true, it is essential that no stereotyped treatment should be followed. Individualize! The patient must be given a balanced, soft diet. Fatty foods are not, at present, held accountable for the formation of gallstones. They do not even raise the blood cholesterol and cholesterol esters. High blood cholesterol is not essential for the formation of gallstones nor for cholecystitis. Fats, such as butter and olive oil, and the ketocholanic acids, judiciously used, aid in the drainage of the gallbladder, if the flow is not obstructed.

The treatment depends on the type of gallbladder disease present and the co-existence of disease of adjacent or distant organs. The general practitioner should exhaust all medical means to cure the patient, but in many instances he should not wait too long to call in the surgeon. Both can discuss the case and the general practitioner can be of invaluable assistance by furnishing the record of the patient and the family history. Both can consider whether cholecystotomy or cholecystectomy is indicated, or if medical treatment should be continued.

Discussion by Lowell N. Clyne, M.D.
McLeansboro, Ill.

Diagnosis: (1) *Visceroptosis*; (2) *chronic cholecystitis*; (3) *achlorhydria*. These diagnoses are based on the feeling of weight and discomfort in the abdomen for several hours after eating; the delayed emptying time of the gallbladder and the findings upon draining it; and the absence of hydrochloric acid in the stomach.

Treatment: Desiccated whole bile, 10 grains (0.65 Gm.) three times a day, after meals; magnesium sulfate, 4 drams (16 Gm.) in water every other morning, before breakfast; and the following prescription:

R

Dilute hydrochloride acid 3iii—12.0 cc.

Elix. lactated pepsin 3i—32.0 cc.

Liq. Takadiastase, q.s.ad 3vi—180.0 cc.

M. et Sig: Two teaspoonfuls, in water, during each meal.

Solution by Dr. Russell

On account of the patient's passing mucous and being badly constipated, and in the absence of specific findings, I concluded that she had colitis.

She was put to bed, on a forced diet of food with large amounts of residue and of butter fats; ordered to lie with her head and shoulders on the floor, face down, legs and thighs across the bed, for $\frac{1}{2}$ hour once or twice a day; and was given enemas of two quarts of hot water containing two ounces of magnesium sulfate every day, followed at night by a pint of cotton-seed oil, as a retention enema, for one week, after which the oil enemas were used alone until her pain ceased.

In six weeks she weighed 124 pounds and had no pain. She is well today.

Comments by George B. Lake, M.D. Waukegan, Ill.

Although the gastro-intestinal features of this case are reasonably clear and were soundly evaluated by the discussants, and Dr. Russell's treatment was successful (which would seem to settle the matter), there is one point that appears to have been overlooked by all of the discussants, and which Dr. Russell did not clear up.

Kraurosis of the vulva, especially in a woman 32 years old, does not "just happen," and is generally, if not always, due to estrogenic deficiency, as was shown by Dr. Wiesstein in CLIN. MED. for December, 1940, page 411. This may or may not have had anything to do with this patient's gastro-intestinal disorder and apparently was not very severe, though it was marked enough to interfere with the vaginal examination.

Since patients consult physicians to find out what ails them and to have *whatever ails them* cured or relieved; and since many patients have *more than one thing* the matter with them, I cannot feel that a doctor has done his full duty by a patient until *every* abnormality has been dealt with. Perhaps Dr. Russell attended to the kraurosis satisfactorily, but he did not say so in his solution, so the report of the case is incomplete.

Problem No. 9 (Medical)

Presented by W. E. McKinley, M.D.
Jewell, Kans.

THE patient was a young man of good habits, white, single, age 19 years, a native of Kansas. His family history was negative, and also his *past medical history*, with the exception of attacks of rheumatism, influenza, and chorea between the ages of twelve and fifteen years.

Present illness: The patient was well until two months before I saw him, April 22, 1935, when he first noticed a "queer feeling" in his head and neck, dizziness, and general muscular aching. He continued to work, but felt "rotten." Two weeks later he consulted a physician, who informed him that he had fever and ordered him to bed for a two-weeks rest, after which, feeling slightly im-

proved, he returned to work for a few days, but not feeling much better he quit work and remained at home, where he spent most of his time in bed.

His morning temperature was from 100° to 101°F., afternoon temperature 103°F., which was attended by chilly sensations and a cold, clammy sweat, occurring almost every night.

He was hospitalized for a few days, and the record shows a weight loss of 20 pounds in two months; he was weaker and tired more easily; said that he felt as if he had the "grip." There was no swelling of the hands, face, or feet; no asthma, nausea, or vomiting; no palpitation; some precordial pain and slight dyspnea; a systolic murmur at the cardiac apex and base, louder at the base; appetite fair; slight icterus of the sclera; no tarry or acholic stools; no sore tongue, diarrhea, blood, or mucus in the stools; no abdominal pain; no masses in the abdomen; no burning, dysuria, nocturia, or hematuria; and no soreness or swelling of the testicles or scrotum. He was nervous and easily upset; slept well; and had no tinnitus, blurring, or diplopia.

Physical Findings: During the examination in the hospital, the patient fainted, and when consciousness was restored he was confused for several minutes. At this time it was discovered that sensation was diminished in his left hand; muscular sense was absent in his left arm and leg; ataxia was present; the left arm and leg were weak; tendon reflexes were greater on the left than on the right. The knee jerks were equal and ankle clonus was present on both sides. No Babinski sign was obtained, but the right side was very sensitive and the withdrawal reaction extreme. Abdominal reflexes were absent on the left side; brisk on the right.

The roentgen-ray report showed a definite enlargement of the cardiac shadow in all its diameters; it extended further to the right than normal; there was slight prominence of the aortic arch, but no dilatation of the descending portion. The size and shape of the heart were typically that of moderate hypertrophy.

The tonsils were submerged and cryptic, and much secretion was expressed from both; ears, normal; usual weight, 158 pounds; present weight, 132½ pounds; blood pressure, 142/62; pulse, 104; the temperature varied between 99° and 102°F.; the pupils were equal and reacted to light; skin pale; teeth in good condition; thyroid slightly enlarged; fading rash over the shoulders; urine, negative, microscopically, faint trace of albumin, no sugar or diacetic acid; hemoglobin, 70 percent; red blood cells, 3,950,000; leukocytes varied between 6,950 and 9,800; *B. abortus* agglutination test, negative; Wasserman and Kahn tests, negative.

Blood Chemistry: Non-protein nitrogen 26.0

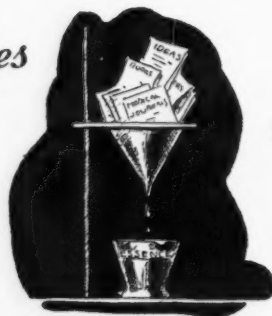
Uric acid	1.5
Creatinin	1.9
Sugar	95.2
Chlorides	4.6

He died on September 30, 1935.

Requirements: Suggest the differential diagnosis, giving reasons, and outline the treatment. What further examinations would you have made, if any?

CLINICAL MEDICINE

The basic idea of clinical medicine is not so much the statistical compilation of symptoms and figures, as the conception of natural and physiologic occurrences, of which disease is only a variation.—S. J. THANNHAUSER, M.D. ("Lipidosis"; Oxford University Press.)



Nephritis Due to Alkaline Urine

A NUMBER of patients have come to me complaining of pain in the kidney region, due, as frequent observations have proved, solely to a change in the hydrogen ion concentration of the urine to the alkaline side. I have seen so many of these cases that I believe it is safe to say that the condition is a definite disease entity of the kidney.

The characteristic case is as follows: A patient comes to the office complaining of pain in the kidney region. Questioning reveals that the pain is usually severe, is worse upon rising in the morning, and then becomes less during the course of the day. Sometimes this pain is so severe that the patient is unable to rise from his bed for some time; but after urinating and as the day goes on, the pain is relieved. Nocturia, frequent urination, and painful urination are not present. Chemical and microscopic examinations of the urine fail to reveal anything other than an alkaline reaction— pH 7.5 or greater.

Dilute nitrohydrochloric acid, 15 drops in one-third glass of water during each meal, cautioning the patient not to let the acid come in contact with his teeth, is the prescription of choice.

My attention was called to this disease some years ago, when I was taking care of an elderly patient suffering from chronic nephritis. I felt that an urologist should be called in consultation, and did so. After making a careful examination, he advised against surgical treatment, as the condition of the patient was so far advanced that an operation would be very dangerous.

This patient complained that every morning he had trouble getting out of his bed, due to the severe pain in his kidney region. He was given the usual anodynes, but to no avail. The urinary examinations revealed that the urine was alkaline and showed the usual findings of the chronic nephritic patient, such as albumin, casts, and sometimes a small amount of blood.

Wondering what effect acidifying this urine would have, caused me to try various methods, such as the use of ammonium chloride, benzoic acid, and finally dilute nitrohydrochloric acid, which latter drug has given more satisfactory results than any other. I have not once found any undesirable effect. Every case has responded well to 15 drops in water during each meal, and in most cases the dose can shortly be reduced to 10, and later to 5 drops three times a day.

It was astonishing how rapidly the pain subsided in this particular patient. In 48 hours from the start of administration of this drug, his urine showed a hydrogen factor of 5.5, and soon after it was 4.5. As soon as it reached 5.5, the pain in his back completely disappeared. Several times during the progress of his disease, this pain returned, and immediately his urine was examined and found to be alkaline. One or two doses of the acid were followed by immediate subsidence of the pain and general symptomatic improvement in the condition.

Another notable case was in a young man 36 years of age, who came to me with a similar complaint of pain in his back. Urine examination showed pH 8.0. He was given dilute nitrohydrochloric acid, 10 drops in water three times a day. After several doses the pain disappeared. He was greatly astonished at this, and I explained to him what I thought the condition was. He asked me if I thought he could safely eat grapefruit, and I told him to try it.

A few days later he reported that when he went to bed he had no pain; on arising in the morning he likewise had no pain; then, with his breakfast, he ate a half grapefruit, and within a half-hour he had the same pain in his kidney region. He then took 10 drops of the dilute nitrohydrochloric acid, and within a half-hour the pain had disappeared.

I told him to try it again and to take a specimen of urine before he ate his grapefruit, another after he had eaten the grapefruit and the pain had returned, and a third after he had taken the acid and the pain had disappeared. This he did, and I found that, in the specimen voided before eating the grapefruit, the pH (using Nitrazine paper) was approximately 5.5; after eating the grapefruit it rose slightly above 7; while the third specimen, taken when he was able to void, returned to 5.5.

In addition to these two cases, I have had many others which have followed the same course, all with the urine history negative except for an alkaline reaction, and immediately upon taking the dilute nitrohydrochloric acid they received prompt and effective relief from their pain.

My impression of these cases is that the alkaline reaction of the urine is due to an improper diet of foods resulting in the production of an alkaline ash. I have used dilute nitrohydrochloric acid on-

ly for temporary and prompt relief, instructing the patient and giving him a list of the high-vitamin A, acid diet, recommended by Higgins, of the Cleveland Clinic, for the treatment and prevention of calculi. It has been my observation among these patients that, using the high-vitamin A, acid-ash diet, there has been a marked improvement in their general feeling of well-being, besides the obliteration of the pain.

This subject, I feel, could and should be studied and reported upon by men engaged in hospital practice connected with large clinics, where more accurate and scientific methods of study and observations of bed patients can be made. It is difficult for a physician in general practice to present a subject in a strictly scientific manner, but I feel that I have had enough experience with these patients to suggest that there is a definite disease entity of the kidneys, caused by alkalinity of the urine.

AUGUST HELMBOLD, M.D.

Newport, Ky.

Manual Removal of the Placenta

MANUAL removal of the placenta should not be attempted until Credé expression under an anesthetic, preceded by an injection of pituitary extract or ergot, has been performed. The anesthetic often brings about relaxation of hour-glass contractions of the uterus.

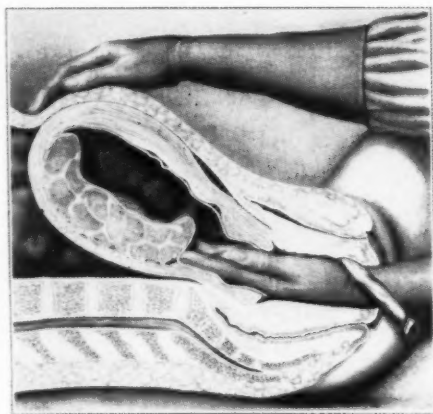


Fig. 1: Manual removal of the placenta.

Indications: (1) Hemorrhage; (2) retention of the placenta; or (3) necessity for intra-uterine exploration following difficult delivery, in order to complete the labor without delay or to rule out uterine rupture. A soft, boggy uterus usually indicates separation of the placenta or partial separation and retention. *The patient with a retained placenta should never be left unattended, for serious hemorrhage may occur at any time.*

Technic: Retractors should be available, so that the vagina and cervical canal can be inspected. Uterine packs and oxytocic drugs should be available. Strict asepsis is essential. If possible, a blood donor should be at hand, because violent blood loss may occur. A transfusion should be given

preoperatively, if the hemorrhage has already been severe.



Fig. 2: Bimanual compression of the uterus.

One hand steadies the uterus and forces it into the pelvis by abdominal pressure. The intra-uterine hand gently pushes the membranes against the junction of the placenta and the uterine wall; all manipulations are conducted *inside the amniotic cavity* whenever possible, to lessen hemorrhage and later infection (see Fig. 1). If a line of cleavage is found, the placenta is slowly peeled off. If not, hysterectomy should be resorted to. *Bleeding should be controlled by bimanual compression of the uterus (see Fig. 2).* Packing is unphysiologic and is often followed by infection. —DRS. R. E. ARNELL and R. F. PHILLIPS, in *South. Med. J.*, June, 1941.

Tularemia

TULAREMIA has been defined, by Francis, as "an acute infectious disease caused by *Bacterium tularensis*, and occurs, under natural conditions, in over 20 kinds of wildlife, especially in wild rabbits and hares. Man becomes infected by contact of his bare hands with the raw flesh and blood of these animals or by bites of blood-sucking ticks and flies which have previously fed on animals infected with *Bacterium tularensis*." Persons who handle wild animals are urged to wear rubber gloves when doing so. All should keep clear of wild rabbits during an epizootic.

Clinical Nature: Symptoms of tularemia include fever, chills, sweating, headache, vomiting, malaise, and prostration.

In most cases, a localized skin lesion or ulcer marks the portal of entry of infection, attended by marked swelling and tenderness of regional lymph glands. In a series of 259 Iowa case records, 235

(90 percent) showed the disease to be of the ulceroglandular type. Of the remaining 24 patients, 22 had no visible local lesion, and two patients had the oculo-glandular form of tularemia. Although the death rate is low, illness is often prolonged. Good clinical results follow the use of antisera, human convalescent serum, and certain drugs, mostly used symptomatically.

Diagnosis: Recognition of the etiologic nature of the illness is dependent upon (1) clinical findings (presence of ulcer and lymphadenopathy); (2) a history of direct contact with an infected animal or tick; and (3) positive agglutination tests. Agglutinins do not appear, as a rule, until late in the second week of illness.

Occurrence: Tularemia has been reported from every state in the Union except Connecticut, Rhode Island, and Vermont. The highest annual rate per 100,000 (8.57, in a 10-year period) is from Nevada. The largest number of cases in a ten-year period from Illinois (1,927), Ohio (900), and Missouri (827). Only 2 cases have been reported from Alaska, and none from the Canal Zone, Hawaii, Puerto Rico, or the Virgin Islands. In Iowa, most of the cases occur in November and December.

IOWA STATE DEPT. of HEALTH

Des Moines, Ia.

Vitamin B Deficiency During Intravenous Dextrose Feeding

THE picture of acute vitamin B₁ deficiency resulting from alcoholism is so well known that the appearance of neuritic pain, nerve and muscle tenderness, motor and reflex disturbances, or edema and tachycardia, without apparent cause, immediately suggests this condition. It is not so well known that maintenance on parenterally administered solutions of dextrose may produce an analogous condition. After four or five days of such treatment, edema, neuritic pain, tender nerve trunks, and motor weakness are not infrequent. This is not due to "waterlogging" of the tissues, as the pain, tenderness, and tachycardia disappear as soon as adequate doses of thiamin (vitamin B₁) are given.—V. P. SYDENSTRICKER, M.D., in *Ann. Int. Med.*, Mar., 1941.

Resuscitation of the Newborn

THE newborn asphyxiated infant should be resuscitated thus: A table 3 feet wide and 4 feet long, with a 4-inch protective edge, is covered with a sterile sheet and warmed blankets. On it are placed sterile towels, an intratracheal catheter with a glass saliva trap, hypodermic syringes containing 1/20 gr. (3 mg.) of Alphalobelin and 15 minims (1 cc.) of 25-percent solution of Nikethamide,* scissors, cord clamps, and dressings.

The infant is immediately wrapped in warm covers and its skin gently but rapidly rubbed for a few seconds. The fingers of the left hand are placed beneath the child's neck and the head bent back. The nostrils, mouth, pharynx, and nasopharynx are aspirated of mucous, amniotic fluid, blood, or meconium.

*Pyridine-beta-carboxylic acid diethylamide (Gane & Ingram).

If respiration does not start, oxygen is administered through a face mask until regular respirations begin or until the baby cries. If this does not occur, alphalobelin is given into the umbilical vein, five to ten gentle mouth to mouth inspirations and expirations are made, and oxygen is begun again.

Nikethamide is given in doses of 2 minims, subcutaneously, at intervals of 10 minutes, until respiration is established; a resuscitator is used, if available. Two minims of epinephrine are given if the heart beat weakens; if it stops beating, epinephrine may be given directly into the heart muscle.—J. D. RUSS, M. D., in *Am. J. Dis. Child.*, Jan. 1941.

Diet in Senescence

DURING senescence, many conditions are prevalent which tend to prevent the adequate utilization of a well balanced diet. But since an ample diet is usually not well-tolerated by this type of individual, a fortified food drink* was used as a supplement to their regular therapy, to supply essential vitamin and mineral elements, and by using it as a flavoring agent, to act as an incentive to these individuals to drink the required amounts of milk.

Thirty (30) cases were studied (21 males and 9 females), ranging in age from 50 to 74 years. In the group reported, 9 had peptic ulcers; 4 chronic cholecystitis; 3 had chronic gastritis; 5 complained of chronic constipation; 2 had mucous colitis; 3 cases were diagnosed as gastric neurosis; 2 had achylia gastrica; 1 a riboflavin deficiency; and 1 was convalescing from a gastric resection. In most instances, these individuals had been on a restricted diet for some time.

The product was well-liked, well-tolerated, and did not cause any aggravation of their symptoms. In most instances, during one month of observation, there was an improvement in the red blood-cell count and hemoglobin percent, an increase in appetite, and a moderate gain in weight. It was also found that the ability to tolerate milk was greatly enhanced by its use.—HARRY BAROWSKY, M.D. in *Med. Rec.*, Aug. 21, 1940.

*Cocomalt, supplied by the R. B. Davis Co.

Methyl Testosterone by Mouth

THE striking results following the use of testosterone and testosterone propionate, in severe cases of male hypogonadism, are well known to all physicians, but these preparations are only slightly active when given by mouth, and their intramuscular or percutaneous employment is not always feasible.

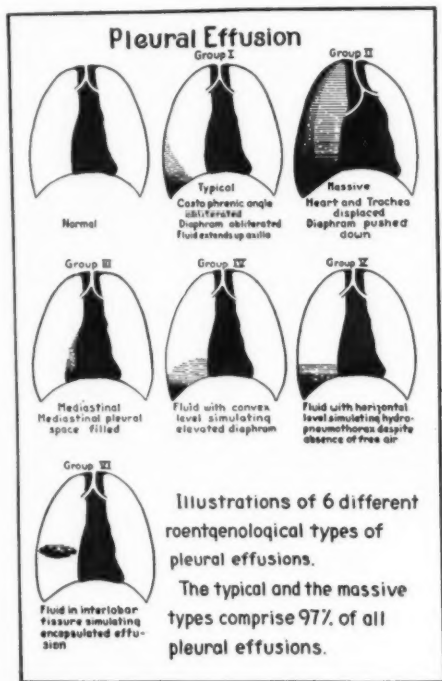
After using the oral administration of methyl testosterone (Oretone-M—Schering Corp.), in maximum doses of 100 mg. a day (50 mg. daily was ample for the average patient), in 3 castrates, 5 eunuchoids, and 4 men with nervous symptoms and partial impotence, I am convinced that this preparation is efficacious when given by mouth, in doses from four to six times larger than those used parenterally or by injection. Simplicity of administration, even distribution of the doses, and the convenience of the patient are its chief advantages, and if it can be manufactured in large quantities at a reasonable cost, it may replace other methods.

In patients who had had good results from testosterone administered in various ways, these

benefits were duplicated and maintained with Oretin-M by mouth, and ill effects, such as slight gastric irritation, are negligible.—WALTER M. KEARNS, M.D., in *J. Clin. Endocrinol.*, Feb., 1941.

Pleural Effusions

PICTURES often have a teaching value superior to that of words, and that is certainly true of the illustration which accompanied an article by Dr. Frank J. Rigos, of Rochester, Minn., on "A Roentgenographic Study of Pleural Effusion," appearing in the May, 1941, issue of *Radiology*, on page 568.



The author and the publishers have been kind enough to give us permission to present this highly educational picture to our readers, so here it is. —ED.

Combined Treatment of Peptic Ulcer

LAROSTIDIN (histidine monohydrochloride), when used in treating peptic ulcer, is analgesic as well as antiemetic, is easily absorbed, and causes no systemic reaction. Prompt relief of ulcer pain occurs when it is given, in a course of from 6 to 24 injections. The parenteral therapy produces beneficial psychogenic response.

Colloidal aluminum hydroxide and magnesium trisilicate are used as agents to control acidity. The old Sippy diet must not be used, as it is deficient in vitamins, minerals, calories, and protein. The diet should be high in protein and vitamins, and addi-

tional vitamins should be given, in capsule or liquid form. Plain gelatin helps to furnish protein needed for growth and repair of cells.

Results: Patients treated with Larostidin-diet-vitamin-antacid therapy were quickly relieved of pain and gained in weight.—C. A. BRUSCH, M.D., in *Rev. Gastroent.*, Nov.-Dec., 1940.

Collodion Finger Splint

ORDINARY, non-flexible, collodion is applied rapidly with a cotton applicator, over the injured finger, from one lateral surface to the other. After one coat has been applied, a second is put on immediately, and a third may be added. It may be applied directly over a wound, as collodion is sterile and transparent and the condition of the wound can be watched through it. If serum accumulates, the collodion is easily removed by peeling it off from one side to the other. Such a simple splint permits the patient to work, to wash, and to carry on all activities.—F. JELSMAN, M.D., in *Am. J. Surg.*, Dec., 1940.

Premonitions of Coronary Closure

FORTY percent of patients experience premonitory symptoms before acute coronary occlusion occurs. Substernal or precordial pain or discomfort are the most common symptoms; fatigue, weakness, gastric distress, dyspnea, palpitation, nervousness, and dizziness are less common symptoms.

The symptoms usually occur within 24 hours of the attack; rarely, they appear as early as 2 or 3 weeks prior to the occlusion. No diagnostic signs of coronary involvement (fever, leukocytosis, tachycardia, fall in blood pressure, characteristic electrocardiographic changes) are found before the occlusion actually takes place.

Treatment: The patient should go to bed at once. This will diminish the extent of the occlusion, which has been gradually increasing, due to primary thrombosis on a plaque or recurrent intramural hemorrhage.—A. M. MASTER, M. D., in *Ann. Int. Med.*, Jan., 1941.

Electric Convulsions in Psychoses

THE indications for the use of electrically induced convulsions are the same as for the other convulsant treatments.

Active tuberculosis, decompensated heart and kidney disease, acute infectious diseases, and other febrile states are the most important contraindications. Patients suffering from severe thyrotoxicosis must not be subjected to convulsive treatment. It is injudicious to thus treat patients who have been long bedridden, and whose bones have become atrophied. Pronounced curvature of the spine is a contraindication; menstruation is not necessarily so.

A large barrel stave, covered with a blanket, is so placed that the maximum convexity is under the middorsal spine to separate the anterior vertebral edges, which are most vulnerable to compression injuries. Injuries to other bones, except those weakened by disuse atrophy, do not occur, because the severity of the muscle spasm, and especially the movements in the joints, are less than in a Metrazol convulsion and insufficient to cause fracture of healthy bones.

Caffeine-sodium benzoate, or another stimulant, should be ready in a hypodermic form in case of emergency. One assistant is necessary during, and for a few minutes after, the treatment.

From the fact that the patient does not experience any pain in his head (the current is very painful), we must surmise that the loss of consciousness is at least simultaneous with, if it does not precede, the motor manifestations.

The duration of the electrically induced convulsions is constant; it never lasts longer than 45 seconds and never less than 35 seconds, from the application of the current to the end of the convulsion, whether 350 milliamperes (the minimal) or 800 milliamperes (the theoretic maximum) are used. It is reassuring to know the exact time when the convulsion will terminate.

Of the patients treated, 58.6 percent of the schizophrenics showed complete remission, and 20.7 percent were improved; 87.5 percent of depressive states recovered; and 3 patients with involutional psychoses all recovered and have been working for a year.—VICTOR E. GONDA, M.D., in *Dis. Nerv. Syst.*, Mar., 1941.

Hormonal Treatment of Chronic Prostatitis and Prostatism

TWENTY (20) patients were treated for chronic prostatitis with an isotonic extract* obtained from the prostate glands of animals. Our results proved that this prostate extract is worthy of consideration as a therapeutic measure in the management of chronic prostatitis.

We also took the opportunity to employ this substance in four cases of hypertrophy of the prostate in senile men whose ages ranged between 65 and 86 years. Discomfort in the perineum lessened and nocturnal micturition disappeared, with a comfortable feeling of contentment.

Further observations will be made in the near future on the application of this extract in the treatment of benign prostatic hypertrophy.—DRS. S. A. SAVITZ & S. CHARTOCK, in *Med. Rec.*, Dec. 4, 1940.

Iodine Deficiency in Draftees

IT has been an interesting experience to examine about 100 young men for the draft. I live in the middle western part of N. Dakota, and though I did not keep a record, about 75 percent did not meet the requirements for general military duty. Practically the entire group had some enlargement of the thyroid gland. A few were rejected because of toxic goiter, and some of the others had indications that a milder degree of this condition was present.

The men were pretty much at ease, having only a local doctor to make the examinations. The general average of pulse rate was higher than a normal should be in this group. The blood pressure readings were higher, both systolic and diastolic, than a group of this sort should have.

Another distinct impression was that the muscular tone should have been much better, and this weakness could account for some of the other reasons for rejection.

Pertinent to the findings I have given is the story of a retired doctor who lived his early life

*Ampacoids Prostate, Reed & Carnrick

in this country. When about 18, he fainted or fell exhausted in a foot race. When he entered his Medical Course he had a physical examination, the record of which he kept. He had a rather fast pulse, and a heart specialist of that time told him he had a neurotic heart. He has been, in the past, quite a busy surgeon. He had no particular trouble until after his sixtieth year, when he began having coronary occlusion.

I have been interested in giving Lugol's solution for different conditions, such as, for instance, that sluggish feeling in the spring. I give 15 or 20 drops in water (an "iodine cocktail"), twice or three times a day for 3 or more days, and find the mind is keener and more alert; in fact, I believe every organ in the body is more active. To my mind, this would be just the thing to do for any one who would have to take difficult examinations, as in a medical course, and would be much better than taking large quantities of coffee.

In the deficiency in the diets, that we are finding in these draftees, I am sure that lack of iodine plays a part, as all people should have a small amount daily. It is just as necessary as sodium chloride.

R. H. RAY, M.D.

Garrison, N. Dak.

Urinary Acidity

THERE is no single value for urinary acidity or alkalinity which may be considered normal, as normality is characterized by variability. Furthermore, the daily fluctuations tend to form a pattern which is typical of the individual. It is not possible to correlate the reaction of a single urine specimen with physiologic behavior.

An abnormal urinary reaction is characterized by fixation, at levels typical of the disease. Alkalosis, in conjunction with a base deficit, is associated with acid urine. The reaction of the urine is not a safe guide in the avoidance of alkalosis due to sodium bicarbonate.

Do not routinely alkalize a patient with acid urine. The daily removal of the acid end-products of metabolism is not a thing to be deplored. If alkalization is attained without a definite aim, the very purpose of urine formation may be defeated.—MILTON BRIDGES, M.D., in *Ann. Int. Med.*, Jan., 1941.

Nodules in The Breast

AS patients consult the surgeon or physician earlier, the proportion of clinically doubtful breast tumors correspondingly increases. Diagnostic biopsies, in dealing with such tumors, should be replaced by a therapeutic biopsy, in which the entire lesion is gently removed, with adjacent healthy tissue.

Ewing feels that cancer will be prevented by the removal of breasts for suspected carcinoma and for recognized chronic cystic mastitis, as histologic study of such breasts shows minute carcinomas and precancerous lesions.—K. E. HYNES, M.D., in *Am. J. Surg.*, Dec., 1940.

Look for THE LEISURE HOUR among the advertising pages at the back.



Diagnostic Pointers

Edema of the Legs

● Edema of the legs, even of both legs, is due to heart failure in a *minority* of cases. It is commonly the result of a local circulatory fault, with or without varicose veins, phlebitis, or obesity.—P. D. WHITE, M.D., in *New Orleans Med. & Surg. J.*, May, 1941.

Cyanosis

● Cyanosis is commonly due to pulmonary disease, rather than heart disease. When it is the result of heart disease, it comes most often from a congenital defect or from pulmonary congestion and local stasis in mitral stenosis without myocardial failure. It is not benefited by digitalis unless the heart rate is high, in auricular fibrillation, or unless the liver is enlarged and the systemic venous pressure raised. Such cyanosis can be endured for years with little harm.—P. D. WHITE, M.D., in *New Orleans Med. & Surg. J.*, May, 1941.

Vitamin B₁ Overdose Symptoms

● The symptoms of thiamin (vitamin B₁) overdosing are similar to those of hyperthyroidism: (1) Fast pulse; (2) irritability; (3) tremor; (4) weakness. Two or three mg. daily will cover adult needs in health; the large doses of 20 to 40 mg. should not be used except in deficiency cases.—C. A. MILLS, M.D., in *J. A. M. A.*, May 3, 1941.

Leukoplakia of the Mouth

● Leukoplakia of the mouth can not always be considered a precancerous lesion. Unless it shows as a pink or white wart, an indurated fissure, an ulcer or a plaque, it is to be petted rather than attacked. A wart occurring on the tongue or oral mucosa is a true precancerous lesion, and should be destroyed as soon as found.—VILRAY P. BLAIR, M.D., in *Miss. Valley Med. J.*, July, 1940.

Râles at Lung Bases

● Râles at the lung bases are not commonly due to heart failure. Most congestion of the lungs (best seen by x-rays) is not accompanied by râles, and most râles, even at the bases, are due to other causes than heart failure, although the factors responsible (atelectasis; pulmonary infarction, which is common at both bases; or infection) frequently complicate heart disease or failure, as in acute coronary thrombosis or serious mitral stenosis.—P. D. WHITE, M.D., in *New Orleans Med. & Surg. J.*, May, 1941.

Early Cancer Diagnosis

● Here are some pointers on the prevention or early treatment of cancer: (1) A nodular goiter has no place in the neck and should be removed; (2) a bowel which functions normally for years, and then suddenly changes this habit, demands rectal investigation by digital, sigmoidoscopic, and possibly x-ray methods; (3) do not cauterize and tampon a cervix for months; (4) do not give casual treatment for *persistent* indigestion over a period of several months; (5) do not treat a chronic ulcer with ointments; (6) if a woman bleeds more and more profusely after childbirth, think of chorionepithelioma before she begins to cough up blood from metastatic nodules in the lungs.—F. S. WETHRELL, M.D., in *Southw. Med.*, Mar., 1941.

Dyspnea

● Do not give digitalis to a person simply because he is short of breath. Chronic bronchitis or asthma with emphysema are common causes of breathlessness; obesity and nervousness, with sighing respiration, are other causes. *The clue is the finding of a normal heart size.* Dyspnea is not due to heart failure or obstruction, as from mitral stenosis, if the heart size is normal.—P. D. WHITE, M.D., in *New Orleans Med. & Surg. J.*, May, 1941.

Pneumothorax and Air Travel

● Patients with pneumothorax should not travel in airplanes, as at lowered atmospheric pressure the lung tends to collapse still further. Those with pleural adhesions, with a pneumothorax of large volume, and those whose pneumothorax has recently been refilled are in greater danger.—W. R. LOVELACE, M.D., in *Proc. Staff Meet. Mayo Clin.*, Jan. 15, 1941.

Symptoms of Diabetes

● These are the common symptoms of diabetes: (1) *Dry mouth*; (2) frequent and night urination; (3) increased appetite; (4) weakness; (5) itching; (6) falling hair and nails; (7) furuncles; (8) dyspnea; (9) palpitation; (10) cold extremities; (11) edema of the legs; and (12) disturbed menstruation.—J. H. BARACH, M.D., in *Penn. Med. J.*, Mar., 1941.

Abdominal Pain

● Right lower quadrant pain persisted in 20 percent of patients who had their appendixes removed for "chronic appendicitis." Far more women than men have right lower quadrant tenderness which is not relieved by appendectomy.—Z. SAGAL, M.D., in *Rev. Gastroent.*, May-June, 1941.

Thumbnail Therapeutics



Coli Metabolin for Hay Fever

● Allergic rhinitis has been successfully treated by a series of from 8 to 12 injections of "Coli Metabolin—Tosse." The first 5 injections must be given within 5 days; the rest may be given with intervals of one day. The treatment is given at the time hay fever symptoms appear. Coli Metabolin consists of the metabolic products of *Bacillus coli* found in the human intestines and grown on specific culture media. Good results in allergic asthma and allergic eczema are also obtained. No maintenance doses need be given.—E. J. ELSBACH, M.D., in *N.Y.S.J.M.*, June 15, 1941.

Fluid in the Pleura

● If there is fluid in the pleura, in amounts larger than that which fills the costophrenic angle, it should be removed, or adhesions will form between the lung and the pleura, thus resulting in a non-expandable lung.—D. McCULLOUGH, M.D., in *Dis. Chest*, Apr., 1941.

Vitamin B₁ in Chronic Bronchitis and Asthma

● The intravenous injection of 30 mg. of thiamin hydrochloride (vitamin B₁) gives satisfactory relief in cases of chronic bronchitis, with or without heart failure and intrinsic asthma. The injection may be repeated every 8 to 24 hours until the cough and dyspnea are controlled; then given at intervals of several days.—O. J. MOREHEAD, M.D., in *Northwest Med.*, June, 1941.

Hypertension

● Hypertension, occurring in the presence of a unilateral kidney lesion, is frequently relieved by surgical operation on the kidney. The renal lesion most amenable to surgical treatment in hypertensive patients is *atrophic pyelonephritis*, which is the result of widespread infection and is characterized by atrophy of the renal tissues and sclerosis of the renal blood vessels. The intravenous urogram shows a small kidney.—W. F. BRAASCH, M.D., in *J.A.M.A.*, Nov. 30, 1940.

[Every patient who has a persistently elevated blood pressure should be encouraged to have a kidney roentgenogram made. Other lesions may also be discovered.—Ed.]

Vitamin K and Bile Salts

● When giving vitamin K to control hemorrhage, in cases of *obstructive jaundice*, be sure to give *bile salts* with it, to insure its absorption.—JAMES P. SIMONDS, M.D., Chicago, Ill.

Injection Treatment of Nasal Obstruction

● Chronic, simple, hypertrophic, and vasomotor rhinitis may be treated by the injection of a 5 percent solution of sodium morrhuate into the submucosa. Such associated symptoms as headache, neuralgia, and postnasal dripping with cough, are markedly relieved or cured.—H. THACKER, M.D., in *Arch. Otolaryn.*, April, 1941.

● Early clamping of the umbilical cord is equivalent to submitting the newborn infant to a hemorrhage at birth.—Q. B. DEMARSH, M.D., in *J.A.M.A.*, June 7, 1941.

Vitamin C in Peptic Ulcer

● Most peptic ulcer patients are definitely deficient in vitamin C, and correction of this deficiency is important in their treatment.—H. FIELD, JR., M.D., et al, in *Ann. Int. Med.*, Oct., 1940.

Prostigmin in Bell's Palsy

● Prostigmin is effective in many cases of Bell's palsy. The dose is from 7.5 to 15 mg. ($\frac{1}{4}$ to 1 tablet) from 3 to 6 times daily, by mouth; treatment is omitted on 1 or 2 days a week. Other traumatic motor nerve lesions are also aided by prostigmin.—E. WOLF, M.D., in *E.E.N.T.M.*, May, 1941.

Liver Extract in Lupus Erythematosus

● The injection of from 5 to 10 units of liver extract, biweekly, has cured 75 percent of disseminated lupus erythematosus patients.—H. KING, M.D., in *South. Med. J.*, April, 1941.

Rheumatoid Arthritis

● The treatment of rheumatoid (infectious) arthritis consists of: (1) acetylsalicylic acid (acetosal), to relieve pain; (2) iron and transfusions, to correct the usual anemia; and (3) injections of gold compounds (sodium-gold thiosulphate, sodium-gold thiomalate, aurothioglucose or Solganal B), in 10 mg. doses, which are gradually increased to 100 mg. once weekly, until from 1 to 1.5 Gm. have been given. The gold injections are repeated in a second course after a rest period of from six to ten weeks. Rest of the affected joints and of the entire body are important aids to recovery.—R. L. CECIL, M.D., in *N. Y. S. J. M.*, Apr. 1, 1941.



THE DOCTOR'S STUDY

The best investment is in the tools of one's trade.—BENJAMIN FRANKLIN.

Physical Medicine

Krusen

PHYSICAL MEDICINE: The Employment of Physical Agents for Diagnosis and Therapy. By FRANK H. KRUSEN, M.D., F.A.C.P., Associate Professor of Physical Medicine, the Mayo Foundation, University of Minnesota; Head of Section on Physical Therapy, The Mayo Clinic; Member of the Council on Physical Therapy, the American Medical Association. 351 illustrations. Philadelphia and London: W. B. Saunders Company. 1941. Price, \$10.00.

THOSE physicians who have visited the old red brick schoolhouse across from the main Mayo Clinic building have been aware of the enthusiasm and knowledge of the men who worked there. The author is unassuming, informed, and studious; he is interested in informing the physician in practice of what can be done and how it may be simply accomplished.

His book is a masterpiece of basic and clinical fact. Each method is considered (1) in the light of its development; (2) as to its basis in physics; (3) as to its method of production; (4) physiologic effects; (5) technic of application; (6) indications; (7) contraindications, limitations and dangers; and (8) conclusions.

Light therapy, electrotherapy, hydrotherapy, mechanotherapy including massage (the photographs of the application of massage are instructive), fever therapy, cold therapy, clinical aspects of physical medicine, the teaching of physical medicine, and the hospital department of physical therapy are discussed under separate sections.

The author stresses the use of simple measures that are available in every community, wherever possible. His text makes fascinating reading for anyone interested in drugless methods of healing.

Endocrinology

Grollman

ESSENTIALS OF ENDOCRINOLOGY. By ARTHUR GROLLMAN, Ph.D., M.D., Associate Professor of Pharmacology and Experimental Therapeutics, Johns Hopkins University Medical School, etc. Philadelphia, London, Montreal: J. B. Lippincott Company. 1941. Price, \$6.00.

THIS is a small volume which gives the essence of glandular function and treatment. No attempt is made to include references to every published paper, to unproved experiments, or to the mass of clinical and laboratory material which has been published in the past twenty years.

His statements are brief and clear, and good clinical photographs are provided.

This book is recommended for the general clinician who wishes to learn sound endocrinology with a moderate expenditure of time.

New Books

Any book reviewed in these columns will be procured for our readers if the order, addressed to CLINICAL MEDICINE, Waukegan, Ill., is accompanied by a check for the published price of the book.

Proctology

Smith

PROCTOLOGY FOR THE GENERAL PRACTITIONER. By FREDERICK C. SMITH, M.D., M.Sc., (Med.), F.A.P.S., Formerly Associate in Proctology, Graduate School of Medicine, University of Pennsylvania; Editor, the Medical World; 161 half-tones, 5 color plates. Second revised Edition. Philadelphia: F. A. Davis Company. 1941. Price, \$4.50.

THIS usable book presents, in simple language, the knowledge necessary to diagnose and treat the common rectal conditions encountered in general practice. The illustrations are of teaching value, and one wishes that there were more. Treatment is given in detail, and the surgical procedures recommended may be carried out with the instruments ordinarily available. The injection treatment of hemorrhoids is well explained and illustrated.

One turns to this book with confidence that it will furnish any commonly needed information on rectal diseases.

Allergy

Cohen

A MANUAL OF ALLERGY. For General Practitioners. By MILTON B. COHEN, M.D., Director of The Asthma, Hay Fever, and Allergy Foundation; Visiting Physician in Allergy, St. Alexis Hospital, Cleveland, Ohio. New York, London: Paul B. Hoeber, Inc. 1941. Price, \$2.00.

TODAY, the family physician must know enough about allergy to treat its manifestations successfully, but has a hard time finding what he needs in the big textbooks written for the specialists. This concise, practical, inexpensive little book is the answer. Here he will find all he needs to know about differential diagnosis and treatment to handle most of these cases satisfactorily, without any padding.

Pharmacology

Gaddum

PHARMACOLOGY. By J. H. GADDUM, Sc.D., M.R.C.S., L.R.C.P., Professor of Pharmacology in the University of London. London: Oxford University Press. 1940. Price, \$6.00.

HERE the physician will find discussed the drugs that he has always used and the newer medicaments that he will use.

For the reader who wants to know the few important facts concerning a drug, this book cannot be recommended too highly. There are no long discussions of animal experi-

mentation, and a number of medicines are dismissed with the notation that they are effective on animals but not on man. This disposes Hertzler's famous statement that a pharmacologist does not consider a drug effective unless it works on the bull frog. Surgeons who use local anesthetics will do well to study the author's pithy comments on such drugs.

Mental Tests

Wang

AN ANNOTATED BIBLIOGRAPHY OF MENTAL TESTS AND SCALES. By CHARLES K. A. WANG, Ph.D., Professor of Psychology, Catholic University of Peking, Peiping, China: Catholic University Press. In two volumes. Price, \$5.00 per volume; \$9.00 per set.

HERE is an up-to-date bibliography of mental tests and scales that will be a necessary tool for those who are engaged in psychiatry, psychology, vocational counselling, teaching, or personnel work. The book is a most complete list of all types of mental tests and scales which may be purchased or have appeared in books and periodical literature printed in English.

The first volume covers tests measuring mental capacity, personality, character, and vocational aptitudes and abilities; the second, tests of educational achievement in science, mathematics, arts, etc. The annotations for each test give: (1) The name of the author; (2) name of the test; (3) date of publication and revision; (4) age, grade, or other suitable grouping; (5) a description of the test as to purpose, content, numbers of forms available, time required to administer, reliability, validity, and other correlations; (6) standardization and norms, stating whether age, grade, percentile, or other norms are available; (7) publisher; (8) price; (9) selected references, giving additional description, construction, or application of the tests. The volumes are well indexed by publishers and authors, as well as by subjects.

With this book at one's disposal, invaluable information and assistance, not readily obtainable elsewhere, is easily available for examining and selecting suitable tests for any particular case.

R.J.C.

Pediatrics

Griffith and Mitchell

TEXTBOOK OF PEDIATRICS. By J. P. CROZER GRIFFITH, M.D., Ph.D., Emeritus Professor of Pediatrics in the University of Pennsylvania, etc., and A. GRAEME MITCHELL, M.D., Professor of Pediatrics, University of Cincinnati College of Medicine, etc. Third edition, revised and reset. 991 pages; 200 illustrations. Philadelphia and London: W. B. Saunders Company. 1941. Price, \$10.00.

THIS is a revised text, formerly entitled "Diseases of Infants and Children." Many parts of the book have been rewritten by the authors and then referred to other men for critical review.

Much new material on mental and emotional health and hygiene has been added. Emphasis is placed on the normal, healthy child, in line with the increasing tendency toward prevention and the general rise in standards of pediatric care by the general practitioner. Masses of bibliography have been deleted, together with obsolete text. This is especially true of the section on artificial feeding, which is now simply and briefly written.

This is a well illustrated, well rounded book on clinical pediatrics.

Contemporary Delusions

Bell

MAN AND HIS LIFEBELTS. By ERIC T. BELL, Professor of Mathematics, California Institute of Technology. Baltimore: The Williams & Wilkins Company. 1938. Price, \$3.00.

TODAY, with schemes of salvation catching on like wildfire, one needs discrimination that is neither based on yesterday's headlines nor derived from tomorrow's goal. One needs facts, and Dr. Bell supplies them in this "statistical survey of contemporary delusions." But one must also remember that facts are not, necessarily, the truth,

and that a mathematician, however clever, is not always a reliable philosopher.

Dr. Bell is neither a prophet nor a constructive critic. He is a qualitative analyst with wit and will of his own, who may make people think twice before they accept any new or old motto. He takes up, in turn, erstwhile life-belts, including, among others, religion, government, righteousness and justice, internationalism, and science. The discussion is clear, witty, and intriguing; but do not let it lead you, along pleasant paths, into accepting sophistries. Read the book for an intellectual shower-bath, but do not go out on the street stripped of the fundamental verities that you know, with your soul.

Hernia

Iason

HERNIA. By ALFRED H. IASON, B.A., M.D., Consulting Surgeon, Long Beach Hospital, etc. Illustrations by ALFRED FEINBERG, Instructor in Medical Illustration, College of Physicians and Surgeons, New York City. Philadelphia: The Blakiston Company. 1941. Price, \$15.00.

THIS large (1,300 pages) monograph covers every aspect of hernias, and not the least interesting section is the historical introduction, with its recitals of the bloody, mutilating procedures carried out by the ancients.

Each type of hernia, its diagnosis and treatment, is presented separately, together with clear surgical sketches. Hernial complications, with and without operation, are discussed. The methods of treatment include injection, truss, and various surgical techniques.

The author has dealt with the subject so thoroughly that every fact pertaining to hernia is assembled in its proper place; hundreds of methods of treatment are described; and compensation data are provided in abundance. The style of writing is delightfully refreshing after the usual stodginess of medical texts.

Electrocardiograms

Pardee

CLINICAL ASPECTS OF THE ELECTROCARDIOGRAM, Including the Cardiac Arrhythmias. By HAROLD E. B. PARDEE, M.D., Assistant Professor of Clinical Medicine, Cornell University Medical College, etc. Fourth Edition, revised. New York and London: Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers. 1941. Price, \$5.75.

THIS is a good book, by a leader in electrocardiography, for anyone wishing to know why he obtains certain electrocardiographic tracings. The normal gram variations are described; the tracings obtained in myocardial disease, hypertrophy, the arrhythmias, and specific diseases are portrayed and their clinical significance analyzed. The theory and operation of electrocardiographs are explained, and there is an adequate bibliography at the end of each chapter; but the illustrations are too small for close study or ready reference.

First Aid

Eliason

FIRST AID IN EMERGENCIES. By ELDRIDGE L. ELIASON, A.B., M.D., Sc.D., F.A.C.S., Professor of Surgery, University of Pennsylvania School of Medicine, etc. Philadelphia, Montreal, London: J. B. Lippincott Company. 1941. Price, \$1.75.

THIS little book is for Boy and Girl Scouts, campers, factory workers, automobilists, housewives, and everybody else who needs to know what to do in emergencies until the doctor comes. It is thoroughly up-to-date, authoritative, well illustrated, substantially made, and can be confidently recommended for the purposes for which it is intended.

The products we advertise are worthy of your attention. Look them over.